

NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

ANALYSIS OF A MULTI-DISCIPLINARY APPROACH TO GUN MISUSE AND THE NEED FOR A PARADIGM SHIFT IN TERMINOLOGY

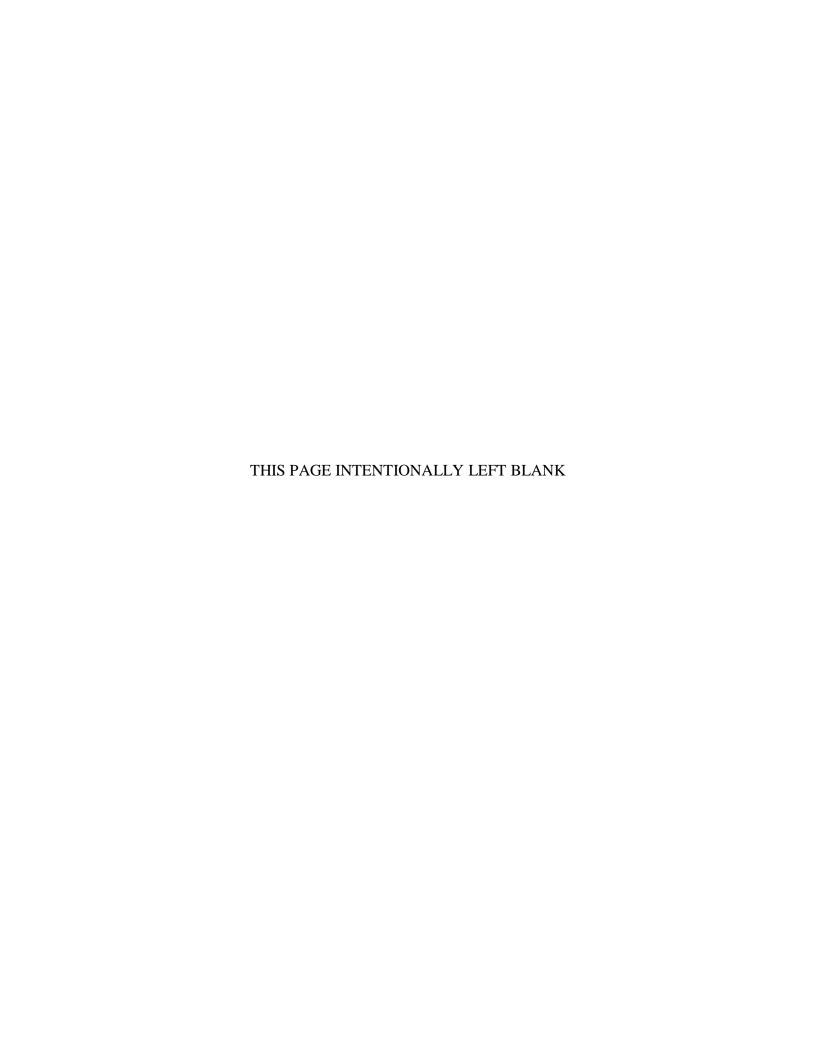
by

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December 2016

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REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2016	3. REPORT TYPE AND DATES COVERED Master's thesis	
4. TITLE AND SUBTITLE ANALYSIS OF A MULTI-DISCII AND THE NEED FOR A PARAD	IGM SHIFT IN TERMINOLOGY		5. FUNDING NUMBERS
6. AUTHOR(S) Damon T. Arnold			
7. PERFORMING ORGANIZAT Naval Postgraduate School Monterey, CA 93943-5000	TION NAME(S) AND ADDRES	S(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING /MONITORIN ADDRESS(ES) N/A	G AGENCY NAME(S) AND		10. SPONSORING / MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES official policy or position of the De	-		
12a. DISTRIBUTION / AVAILA Approved for public release. Distri	·-		12b. DISTRIBUTION CODE

13. ABSTRACT (maximum 200 words)

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Further, it provides a clearer path for stakeholders from both the public and private sectors to approach and make recommendations when confronting the issue of gun misuse that includes legislative, policy, and technological approaches. This type of approach may pave the way for addressing other issues of common interdisciplinary concern.

14. SUBJECT TERMS interdisciplinary approach interparadigm shift from "gun cont technological approaches to gu culture, constitutional rights, p	15. NUMBER OF PAGES 247 16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. 239-18

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ANALYSIS OF A MULTI-DISCIPLINARY APPROACH TO GUN MISUSE AND THE NEED FOR A PARADIGM SHIFT IN TERMINOLOGY

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Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN SECURITY STUDIES (HOMELAND SECURITY AND DEFENSE)

from the

NAVAL POSTGRADUATE SCHOOL December 2016

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ABSTRACT

The threat of gun misuse occurs against the backdrop of historical, cultural, and legal perspectives within which guns are immersed. This thesis explores the potential for collaboration among the medical, legal, and homeland security disciplines when confronting a commonly held threat, such as gun misuse.

Currently, each discipline has a unique and sometimes conflicting definitional view of what the term "gun control" actually means, as well as how it is to be operationally approached. What emerges within this thesis is the position that "gun control" is not even the correct term to use and should be avoided when addressing issues involving gun misuse. Rather, the use of the term "gun misuse prevention" appears to be more appropriate. Such a shift in perspective is not only more consistent with the gun misuse data presented, but also serves to dampen the polarization imposed by the use of the term "control."

Further, it provides a clearer path for stakeholders from both the public and private sectors to approach and make recommendations when confronting the issue of gun misuse that includes legislative, policy, and technological approaches. This type of approach may pave the way for addressing other issues of common interdisciplinary concern.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACA Affordable Care Act

ACLU American Civil Liberties Union

ASIS American Society for Industrial Security, International ATF Bureau of Alcohol, Tobacco, Firearms and Explosives

CDC Centers for Disease Control and Prevention

CENTER character, entrepreneurship, ownership, tenacity, excellence, and

relationship

CIA Central Intelligence Agency

CIKR critical infrastructure and key resource sectors

CLAM'N coercion litigation arbitration mediation and negotiation

CVE countering violent extremism

D.A.R.E. **Drug Abuse Resistance Education**

DEA **Drug Enforcement Agency**

DHHS Department of Health and Human Services

DHS Department of Homeland Security

DOE Department of Education

DOJ Department of Justice DOS Department of State

EOP Executive Office of the President

ERA effective range of accuracy **ESF** essential support function **FAWB**

federal assault weapons ban

FBI Federal Bureau of Investigation

FEMA Federal Emergency Management Agency

FFL federal firearms licensees

FLETC federal law enforcement training centers

FP firing point FY fiscal year

GAO Government Accountability Office

GJISI Global Justice Information Sharing Initiative GTD geospatial tracking device

H.R. House Resolution

HHS Department of Health and Human Services

HIA health impact assessment

HIPAA Health Insurance Portability and Accountability Act

HSAS Homeland Security Advisory System

HUMINT human intelligence

ICE Immigration and Customs Enforcement Administration

ICS incident command system

IDLH immediately dangerous to life and health

IFF intelligent fast failureIOM Institute of MedicineIoT internet of things

IT information technology

JFK John Fitzgerald Kennedy

JIEM justice information exchange model

JS judicial system

LE law enforcement

MC medical care

MDS minimum distance for safety
MOU memoranda of understanding

NCIC National Crime Information Center

NCIPC National Center for Injury Prevention and Control
NCISP National Criminal Intelligence Sharing Program

NCPC National Crime Prevention Council
NCTC National Counter Terrorism Center

NDA non-disclosure agreements

NFA National Firearms Act

NICS national instant criminal background check system

NIEM national information exchange model

NIMS national incident management system

NPEC national public education campaign

NRA National Rifle Association NRC National Research Council

NRF national response framework

NSA National Security Agency

NSSF National Shooting Sports Foundation
NTAS National Terrorism Advisory System
NVDRS national violent death reporting system

OCR Office of Civil Rights–Health and Human Services Administration

OCRS Office of the Coordinator for Reconstruction and Stabilization

OIG Office of the Inspector General

OM occupational medicine
PAC physical access control

PHC public health care

PSA public service announcements

QHSR Quadrennial Homeland Security Review

RFID radio frequency identification device

SAE Society of Automotive Engineers

SOC self-organized criticality

SRA specified range for accuracy

SSR security sector reform

TSA Transportation and Security Administration

UK United Kingdom

USCG United States Coast Guard

VIN vehicle identification number

XML global justice extensible markup language

XRD-TB multi-drug resistant tuberculosis

EXECUTIVE SUMMARY

This thesis explores the potential utility of creating collaborative homeland security, legal, and healthcare interdisciplinary approaches to address the issue of gun misuse. Each discipline presents compelling reasons for the development of effective approaches to address this test case issue of gun misuse. A functional disciplinary overlap also exists that becomes even more obvious, for example, when confronted by the aftermath consequences of school shootings and the Boston Marathon terrorism-related bombings. Despite this apparent functional overlap, little attention is paid to potential interdisciplinary collaboration and the development of unified prevention-based approaches to address gun misuse. Yet, a preliminary question remains as to whether prevention-based interdisciplinary approaches to gun misuse should be earnestly striven for, are actually achievable, or even desirable.

Such interdisciplinary approaches to gun misuse would have to be evaluated to discern whether they provide a benefit, have no effect at all, or act to increase overall public vulnerability. For example, could an overreliance upon increasingly interdependent disciplinary approaches reach a point of self-organized criticality (SOC) and as a result tend to fail? That is, the creation of interdisciplinary approaches might work to drain resources or serve to increase the level of bureaucratic complexity surrounding the issue of gun misuse. Conversely, might the development of interdisciplinary approaches aid in reducing the overall risk-based consequences of gun misuse threats? This thesis holds that such ambiguities created by these questions should not result in a lost opportunity for the exploration of potential gun misuse prevention approach improvements. A stance that ignores the need to address gun misuse consequences would appear to be innately unethical and unconscionable from the perspectives held by each of the involved disciplines.

¹ Ted G. Lewis, *Bak's Sand Pile—Strategies for a Catastrophic World* (Salinas, CA: Agile Press, 2011), 15–17.

² Ted G. Lewis, *Critical Infrastructure Protection In Homeland Security—Defending A Networked Nation* (Hoboken, NJ: John Wiley and Sons, 2006), 41–42.

Chapter I provides an introduction and general overview of both historical and contemporary considerations concerning gun ownership and use. It also contains an explanation of the terminology to be used within the context of this thesis. Impediments to discussions regarding gun misuse are also presented. Next, in Chapter II, the thesis continues with an overview of the public healthcare, legal and homeland security disciplines and some of the challenges they face with respect to gun misuse approaches. The foundation is thus laid for a comparative analysis of these disciplinary approaches. In particular the need for the development of effective interdisciplinary approaches to gun misuse is highlighted. Insights from several authors and Cynefin modeling serve to guide this analysis process.³ Chapter III provides a detailed overview of the gun misuse research methodology utilized with this thesis.

Chapter IV presents some potential interdisciplinary, as well as public and private approaches to address the issue of gun misuse. What also emerge are potential technological solutions for gun misuse prevention both within the private, as well as public arenas.

In Chapter V, conclusions are drawn from this thesis, as well as some potential recommendations to address further the issue of gun misuse within this nation are then offered. Rather than focusing on removing guns from society, this thesis places the emphasis on how to diminish potential instances of gun misuse risk. That is, from a viewpoint of prevention. Obstacles to the creation of interdisciplinary, as well as private, approaches to gun misuse exist. However, the potential benefits may well be worth the efforts to assure the prevention of instances of gun misuse, which seems to make for a great "Monomyth" adventure starting point.⁴

³ David J. Snowden, "The Social Ecology of Knowledge Management, Cynefin: A Sense of Time and Space," in *Knowledge Horizons: The Present and the Promise of Knowledge Management*, ed. Charles Despres and Daniele Chauvel (Oxford: Butterworth Heinemann, 2000), 237–265.

⁴ Sara Hoffman, "The Hero's Journey: A Postmodern Incarnation of the Monomyth" (master's thesis, University of Mississippi, 2012).

ACKNOWLEDGMENTS

First, I commend the Naval Postgraduate School for housing such an important and influential educational program as the Master's degree in Homeland Defense and Security. I would like to acknowledge the talented and dedicated professionals at the Center for Homeland Defense and Security who served as instructors and administrators making my educational journey even possible. They all provided a truly remarkable and uniquely enriching academic experience. However, their reach extends far beyond the academic setting, as they help to develop and educate those whose lives are intimately entwined with actual national and global defense and security.

I would like to thank my thesis advisor Christopher Bellavita, and second reader Lauren Wollman, for their extraordinary patience, guidance, and support during the completion of this thesis. They served as beacons and sources of guidance within the vastly complex arena of homeland defense and security theory while aiding in keeping me grounded in reality. I am forever indebted to the support, tools, and education with which they provided me. It is my hope that I have in some way achieved what they feel was a worthwhile investment of their time and efforts.

The contributions made by Glen Woodbury, Heather Issvoran, Alicia Blount, Judith Stiles, and Craig Coon saved me from major disruptions and potential disasters all along the way. They displayed what academic environment professionalism should be and constantly made personal sacrifices with respect to their support and time provided on my behalf, as well as for my cohort members. It would be a great error not to mention the Dudley Knox Library where Greta Marlett and her staff provided a resource that deeply enriched my educational experience. They made the completion of a thesis possible. Greta opened my eyes to approaches to finding research information that I will carry with me throughout time. I am eternally indebted to them all!

Each of my cohort members, in 1205 and 1206, contributed greatly to both my educational experience and my views of the nation within that we live. They challenged me to be better and also filled me with a deep and lasting sense of pride in knowing that

we have such dedicated and caring professionals within this nation. Their service to this nation is truly commendable and inspirational. I would be remiss not to thank the Armed Military and Coast Guard service members, firefighters, law enforcement officers, and all government agency professionals who continuously keep this nation safe and secure. As we studied, worked, and slept, they allowed us the opportunity to do this within a safe, secure and relatively tranquil nation.

I thank my wife Sharon for her understanding and outstanding support. She unselfishly provided me with the time, space, and daily support I needed to accomplish this goal. Finally, I would like to thank my thesis editor Nancy Sharrock. It was no easy task to work with this thesis, but Nancy is a remarkably skilled editorial professional. She helped to allay my fears and provided invaluable guidance during the editorial process. I am eternally grateful for her dedicated assistance with this process.

This thesis represents an analysis of the issues surrounding the use of guns within this nation. It also evaluates the potential need for interagency collaboration when addressing the consequences of gun misuse. I hope that this thesis will make a contribution to furthering the defense and security of this remarkable nation.

I. INTRODUCTION

I have steadily endeavored to keep my mind free so as to give up any hypothesis however much beloved as soon as the facts are shown to be opposed to it. I feel within me an instinct for truth.

~ Charles Darwin

A. THE NEED FOR INTERDISCIPLINARY COLLABORATION TO ADDRESS GUN MISUSE

This thesis explores the consequences and potential approaches to the inappropriate use of guns in American society. A complicated and sometimes complex disciplinary overlap appears to exist that becomes even more obvious when confronted by the aftermath consequences of, for example, school and terrorism-associated shootings. Despite an apparent functional overlap concerning gun misuse, little attention appears to be paid to potential interdisciplinary collaboration and the development of unified prevention-based approaches to address this issue at a practical level.

Yet, a question remains as to whether prevention-based interdisciplinary approaches to gun misuse should be earnestly striven for, are actually achievable, or even desirable. Unfortunately, the public's fundamental rights and liberties have the potential to become extinguished by governmental attempts to ensure public safety and security. Despite these attempts, a stance that ignores the need to address gun misuse consequences that negatively impact the public would appear to be innately unethical and unconscionable from the perspectives held by each of the involved disciplines. With this viewpoint in mind, a compelling need to address gun misuse from a well-balanced, multi-disciplinary perspective appears to exist.

B. PURPOSE OF THE STUDY

Homeland security efforts to detect and prevent the misuse of guns during criminal and terrorism-related acts are an ever-present reality of modern life. The need also exists for the prevention of the criminal misuse of guns that confront legal and law enforcement systems on a daily basis. A compelling healthcare need for the prevention of gun misuse that results in tragic injuries and deaths also exists. A paradigm shift in terminology from "gun control" to "gun misuse prevention" is used to allow a deeper quantitative, research-based exploration and analysis of the factors that shape disciplinary approaches to gun misuse. Further, this thesis explores whether collaborative interdisciplinary approaches can aid in resolving problems of common interest to the homeland security, healthcare, and legal disciplines. As a test case, this thesis provides for a clearer examination of interdisciplinary collaboration concerning gun misuse. To accomplish this task, this thesis reframes the gun misuse issue from the commonly used term of "gun control" to one of "gun misuse prevention." Such a shift in terminology allows for a clearer examination of the gun misuse issues at hand.

C. FIVE RESEARCH QUESTIONS PERTAINING TO THE ISSUE OF GUN CONTROL

The convergence of these disciplines around the issue of gun misuse creates a functional-practices overlap. Such an overlap appears obvious when confronted by the threats and injuries sustained by the victims of intentional and random shootings or terrorism-related attacks.⁴ This functional overlap then begs the question of whether a

¹ Kirk S. Marlowe, "The Homeland Security Enterprise: Where Do We Fit?" (master's thesis, Naval Postgraduate School, 2009).

² "Occupational Medicine Practice Framework Guidelines," accessed March 12, 2013, http://www.calea.org.

³ World Health Organization, Commission on Social Determinants of Health, *Closing the Gap in a Generation—Health Equity through Action and the Social Determinants of Health* (Geneva, Switzerland: World Health Organization, 2008); see also Dan Wikler and Richard Cash, "Ethical Issues in Global Public Health," in *Global Public Health*, ed. Robert Beaglehole and Ruth Bonita (Oxford: Oxford University Press, 2009).

⁴ Lessons Learned from the Boston Marathon Bombings: Improving Intelligence and Information Sharing: Hearing before the Committee on Homeland Security and Governmental Affairs, United States Senate, 113th Cong., 2 (2014).

need exists for some degree of integration of these disciplinary approaches. Specifically, this thesis addresses the following five questions:

- Do commonly held disciplinary, as well as public misperceptions and impediments to discourse exist regarding why, where, when and with whom gun misuse-related injuries and deaths occur?
- How do the homeland security, legal, and healthcare disciplines perceive, define, interpret and approach the issues surrounding gun misuse-related injuries and deaths?
- Would a paradigm shift in terminology to gun misuse prevention lead to a better understanding of the factors that tend to shape inappropriate, as well as appropriate disciplinary approaches to gun misuse?
- Would the creation of an interdisciplinary perspective and the sharing of disciplinary information provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse?
- Can public and private partnerships assist in addressing the occurrence of gun misuse-related injuries and deaths?

D. THE SIGNIFICANCE OF INTERDISCIPLINARY COLLABORATION

Within the answers to the thesis questions presented, might reside the potential for significant benefits when approaching gun misuse from an interdisciplinary perspective. For example, the prevention of gun misuse-related injuries and deaths within the general public might be realized by an improved coordination of policing and medical rescue efforts. Conversely, it must be kept in mind that the possibility also exists that incompatible disciplinary perspectives or incorrectly orchestrated interdisciplinary approaches might tend to worsen gun misuse-related outcomes. These questions then set the stage for exploring whether or not, and to what degree, interdisciplinary collaboration should be earnestly striven for, is actually achievable, or even desirable.

E. A PREREQUISITE PARADIGM SHIFT IN GUN USE TERMINOLOGY

Currently, the term "gun control" generally sets the stage for talks involving gunrelated issues. As a preliminary methodological step, this thesis presents a shift in terminology from "gun control" to "gun misuse prevention" to reframe the problem of the inappropriate use of guns. The reason for this shift in perspective is an attempt to clarify the issues surrounding gun misuse. To accomplish this goal, misperceptions and the complexities surrounding gun misuse, as well as the effects of advocacy group polarization must be placed in proper perspective. To aid this process, some terms utilized within the context of this thesis are defined.⁵

1. Gun

The term "gun" in this thesis is used as a general term to include handguns, rifles, and assault weapons, unless the use of a specific type of gun is specified. With the advancement of gun manufacturing technologies, high-powered air and 3-D printed "guns" are now also appearing within the marketplace. The statutory and legal recognition and acceptance of these objects as true "guns" is a bit more obscure and is discussed further within this thesis. See Appendix A for gun ultrastructure characteristics, classifications, and related terminology.

2. Gun Control

In general, the term "control" implies the presence and application of a force or mechanism external to the subject or event being guided. For example, traffic lights and speed limit signs attempt to control the behaviors of drivers. This thesis defines the term "gun control" as any attempt to modify or block gun access or use directly with respect to anyone seeking or actually in possession of a gun. Legally and statutorily-based gun control efforts attempt to establish guidelines and requirements regarding who exactly gets to own a gun and why. It also establishes what types of guns a person may possess, as well as where and in what manner they may be used legally. This concept then speaks to the possessor's safe handling and intentional uses of the gun and how it is to be regulated. It also sets the stage for determining what is deemed to be unauthorized or inherently illegal with respect to gun possession and usage. Some gun owners see this term "control" as a direct threat to gun ownership and their constitution-based rights.

⁵ *Merriam-Webster's Collegiate Dictionary*, 10th ed. (Springfield, MA: Merriam-Webster Incorporated, 1999).

3. Gun Misuse

As used in this thesis, the term "gun misuse" implies either the inappropriate intentional or unintentional use or handling of a gun. Such unintentional misuses include acts arising from gun use or handling-related negligence, as well as accidents. Note that gun misuse does not always result in a recognizable or documented poor outcome as it does with a gun-related injury or death.

4. Gun Misuse Prevention

Gun misuse prevention as used within this thesis involves the proactive approaches and steps taken to prevent the unintentional, as well as intentional misuse and mishandling of a gun that has the potential to result in property damage or bodily injury and death.

F. THESIS DESIGN RESEARCH LIMITATIONS

This thesis explores potential public and private, as well as homeland security, legal, and healthcare disciplinary approaches to identify and address the alignment of those factors leading to gun misuse. Inherent quantitative research design limitations applicable to the research conducted within this thesis do occur. A preliminary assumption also made within this thesis is that the correct questions are being asked in the first place. Potential limitations inherent in how the literature was selected, collected, validated, organized, weighted, and applied were also raised during the analysis process. For example, the relevance of dated viewpoints or research findings and the changes occurring in the real world as this research was conducted might potentially impact the conclusions drawn at the completion of this thesis.

The categorization and assignment of specific literary sources to each of the five research questions raised within this thesis was also difficult at times. The use of information and data from the selected literary sources may also have been taken out of the original context or interpretation intended by their original author(s). Further, despite being mainly a quantitative study utilizing over 400 references, a question arises as to whether the sample size of literary sources used was in excess, adequate, or insufficient

for the purpose of answering the five questions posed within this thesis. Some qualitative data was selected from what are believed to be reliable sources. However, the research design utilized within this thesis does not provide for the verification or validation of the data obtained from literary sources. Another potential weakness is that direct interviews and surveys of homeland security, legal, and healthcare disciplinarians were not included and conducted as part of the research design process. Validation bias was kept in mind by the author of this thesis but may still have been operational despite the intent to use an approach directed at quenching polarized views concerning issues surrounding gun misuse. More is said in this thesis about limitations and other forms of bias in Chapters III and V.

This thesis now moves on to Chapter II to discuss the literature reviewed and the considerations made regarding the literature and other sources of information selected and utilized within this thesis.

II. REVIEW OF THE LITERATURE RELATED TO GUN OWNERSHIP AND USE

Massive volumes of literature and other materials exist concerning the complex nature of gun ownership and use, as well as misuse. A number of critical documents include governmental publications and academic research studies, as well as advocacy group and public lay perspectives regarding gun misuse. The validity of the various viewpoints and opinions expressed within these documents requires analysis and a heightened level of scrutiny with respect to the perspectives put forth and the claims made by their authors. Due to the nature of the complicated and often seemingly complex controversies surrounding gun ownership and use, the methodological approach utilized for the literature review, analysis, and synthesis process was directly influenced by two theoretical considerations.

First, a Cynefin theoretical approach was employed as a foundation to conceptually support a paradigm shift from "gun control" to "gun misuse prevention." Definitions related to this paradigm shift in gun misuse-related terminology were then further defined and clarified. This shift in terminology plays an important contextual role when used within the literature review process of this thesis. This paradigm shift afforded a clearer and less biased view regarding the selection, examination, and analysis of the literature chosen for this thesis. In addition, it potentially provides the basis for a deeper level of comprehension of the results derived from the literature review process.

Secondly, misperceptions and impediments to discourse and attempts made to address gun misuse were identified through a literature search and information selection and collection review process. These identified potential impediments to discourse and action were evaluated for their potential to bias the results and conclusion drawn within this thesis. Specifically, concern existed regarding the effect of these impediments upon the research literature selection and synthesis process utilized within this thesis.

Five research questions are presented within this thesis:

- Do commonly held disciplinary, as well as public misperceptions and impediments to discourse explain regarding why, where, when, and with whom gun misuse-related injuries and deaths occur?
- How do the homeland security, legal, and healthcare disciplines perceive, define, interpret and approach the issues surrounding gun misuse-related injuries and deaths?
- Would a paradigm shift in terminology to gun misuse prevention lead to a better understanding of the factors that tend to shape inappropriate, as well as appropriate disciplinary approaches to gun misuse?
- Would the creation of an interdisciplinary perspective and the sharing of disciplinary information provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse?
- Can public and private partnerships assist in addressing the occurrence of gun misuse-related injuries and deaths?

This literature review focuses upon five questions related to the need for interdisciplinary, as well as public-private partnership approaches to address gun misuse. Over 400 library and on-line general reference and scholarly literary documents were reviewed. This material was used as part of a quantitative, inductive reasoning, and analysis process within this thesis.

Chapters II, IV, and V are arranged in the same exact topical format for ease of use by the reader to allow for a more focused reading of issues related to each of the five specific research questions raised within this thesis.

The first cross-section of Chapters II, IV, and V (Headings A and B) address research related to whether commonly held misperceptions and impediments to discourse exist regarding gun misuse. Specifically, this section addresses the first research question of why, where, when, with whom, and in what ways gun misuse-related injuries and deaths actually occur. A focus is placed upon the role that homeland security, legal, and healthcare disciplinary perceptions play in approaching the issues surrounding gun misuse.

The second cross-section of Chapters II, IV, and V (Headings C, D, and E) address research related to the second research question. This section explores how the

homeland security, legal, and healthcare disciplines perceive, define, interpret, and approach the issues surrounding gun misuse-related injuries and deaths.

The third cross-section of Chapters II, IV, and V (Heading F) address the third research question. This section examines whether a paradigm shift in terminology from gun control to gun misuse prevention would lead to a better understanding of the factors that tend to shape inappropriate, as well as appropriate disciplinary approaches to gun misuse.

The fourth cross-section of Chapters II, IV, and V (Heading G) address the fourth research question. This section examines whether the creation of an interdisciplinary perspective and the sharing of disciplinary information might provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse, which is tied to the fourth research question.

Finally, the fifth cross-section of Chapters II, IV, and V (Heading H) discuss research related to the fifth research question. This section examines whether public and private partnerships can provide assistance in addressing the occurrence of gun misuse-related injuries and deaths.

The thesis now turns to a quantitative exploration of the literature surrounding gun misuse to discern if the research questions presented by this thesis are appropriate and can be satisfactorily answered.

• Do commonly held disciplinary, as well as public misperceptions and impediments to discourse exist, regarding why, where, when, and with whom gun misuse-related injuries and deaths occur?

A. HOLDING ONTO MY AMERICAN GUN: HISTORICAL PERSPECTIVES ON GUN OWNERSHIP AND USE

An assumption is made within this thesis that an understanding of gun ownership and use does not rely solely upon a logical analysis of isolated gun-related facts and figures. Guns are immersed and deeply rooted within American society, which is comprised of a diverse milieu of fundamental cultural practices, identities, and personal,

as well as collective experiences.⁶ In the glow of their personal social and cultural experiences arise the perspectives individuals use to confront the issues surrounding gun use and ownership rights. Race, ethnicity, age, gender, and social class all appear to play a role with respect to gun ownership and use.⁷ Such demographic factors appear to impact and modify the social consequences individuals face for gun possession and use, as well as misuse.

Gun use has been tied to the very existence of this nation from its very inception. Aside from the American Revolutionary and Civil Wars, gun misuse appears to have been traditionally viewed by the public largely through the lens of foreign wars or remote national shooting incidents as presented within local and national media sources. Despite this viewpoint, guns have a long and highly significant role in both the formation and historical underpinnings of this nation.

Historically, the British attempted to disempower the colonialists with a gunpowder embargo. 8 The capture of armory gunpowder stores at Williamsburg, VA incited the "Gunpowder Incident" and a standoff between the colonialist Patrick Henry and the Royal Governor of Virginia, Lord Dunmore. 9 To resolve this issue, the British government eventually had to pay the colonists for the stolen gunpowder. 10 The British also confiscated the cannon of the Concord and Lexington militias, which led to battles on April 19, 1775, and set the "minutemen," notably Paul Revere, William Dawes, and Dr. Samuel Prescott, into motion, inciting the Revolutionary War. 11

⁶ *Wikipedia*, s.v. "Gun Politics in the United States," last modified September 1, 2016, https://en.wikipedia.org/wiki/Gun_politics_ in_the_United_States.

⁷ Chester W. Hartman, *Challenges to Equality: Poverty and Race in America* (Armonk, NY: M.E. Sharpe, 2001); see also Wilbur R. Miller, *The Social History of Crime and Punishment in America: An Encyclopedia* (Thousand Oaks, CA: SAGE, 2012).

⁸ Wikipedia, s.v. "Gun Politics in the United States."

⁹ "Primary Documents Relating to the Seizure of Powder at Williamsburg, VA, April 21, 1775," accessed May 11, 2013, http://:www.revwar75.com/battles/primarydocs/Williamsburg.htm.

¹⁰ Saul Cornell, A Well Regulated Militia: The Founding Fathers and the Origins of Gun Control in America (New York: Oxford University Press, 2006).

¹¹ Paul Revere, *Paul Revere's Three Accounts of His Famous Ride*, Introduction by Edmund Morgan (Boston: Massachusetts Historical Society, 1961).

These historical situations underscore the fact that gunpowder, munitions, and the "right to bear arms" were central and essential features of American culture from its very inception. This view seems to be supported by the fact that the adoption of the Second Amendment concerning the right to bear arms on December 15, 1791, and the Fourth Amendment prohibiting unreasonable searches and seizures without probable cause on March 1, 1792, were felt to be essential for freedom and the right to self-governance. It appears that gun rights were considered to be essential for the defense and ultimate survival of a newly emerging democracy according to the literature reviewed. Yet, the public has been relatively protected from a myriad of complex global events, substantive issues, and ideological viewpoints concerning the use of guns. That is, until more recent times. In addition, guns literally outnumber people within the United States. 12

Pro-gun advocacy groups assert the position that guns are a way of life for many law-abiding citizens. A legal and constitution-based right to gun ownership and usage is to be noted. These groups tend to highlight the ever-present risk for the infringement or gross violation of gun ownership rights protections. Despite this viewpoint, can it be assumed that gun owners are capable of deciphering the safe from the reprehensible and dangerous when it comes to gun use safety and security? Just such a question was confronted and pondered by the Forefathers of this nation when attempting to discern the direction citizens within this nation would take when left to their own devices. Can the public be trusted with self-regulation when it comes to the use of guns? Further, individual and collective roles and responsibilities with respect to gun ownership and use, as well as misuse are currently relatively ill-defined and transitory. In this regard, after a review of the literature concerning the consequences of gun misuse, it appears that a need might exist for some form of gun ownership regulation.

¹² Aaron Karp, "Small Arms Survey 2007: Guns and the City," 39 Small Arms Survey (August 2007).

¹³ Lance K. Stell, "Gun Control and the Regulation of Fundamental Rights," *Criminal Justice Ethics* 20, no. 1 (2001): 28–33.

¹⁴ Ibid.

¹⁵ Donald Phillips, *The Founding Fathers on Leadership* (New York: Hachette Book Group USA, 1997): 212–215.

¹⁶ The Constitution of the United States of America: Analysis and Interpretation, S. Doc. No. 103–6.

American society currently presents itself as a place of openness, creativity and free expression. Although these are possibly laudable and indispensable goals and ideals, a higher degree of vulnerability with respect to gun misuse may be the result. Lurking in the smoke and fog of gun misuse aftermaths arise the sometimes unpredictable, as well as complex legal and policy consequences with which this nation continues to confront and contend. Add to this scenario the reality that organized groups have participated in the crystallization of often polarized perspectives for addressing gun misuse through political advocacy, lobbying, and collective action. Using the conceptual framework of Cynefin modeling, this thesis proposes that a paradigm shift to using the term "gun misuse prevention," rather than "gun control," may assist in piercing this veil of complicated and often complex issues surrounding gun ownership, use, and misuse.

B. MISPERCEPTIONS AND IMPEDIMENTS TO GUN MISUSE DISCOURSE

The literature appears to support the existence of several factors impeding an open dialogue regarding gun misuse. For this reason, the use of the term "gun control" is specifically avoided in many sections of this thesis because of both the associated geopolitical overtones associated with using the term "gun control," as well as the narrow and polarized view it places upon the overall issue of "gun misuse." In addition, such a polarized view appears to be innately contrary to the quantitative literature selection, review, and analysis process rationale and methodological approach utilized within this thesis. For this very reason, the preferred gun-related terminology as used for the purpose of this thesis was more clearly defined in Chapter I.

To explore these potential misperceptions and impediments to discourse more effectively, an inductive and quantitatively based form of literature review is performed

¹⁷ Stell, "Gun Control and the Regulation of Fundamental Rights," 28–33.

¹⁸ Scott Clement, "NRA Members Strongly Oppose New Gun Restrictions, Poll Finds," *The Washington Post*, January 25, 2013, http://www.washingtonpost.com/blogs/the-fix/wp/2013/01/25/nramembers-strongly-oppose-new-gun-restrictions-poll-finds/; see also Sarah Brady with Merrill McLoughlin, *A Good Fight* (New York: Publicaffairs, 2002); U.S. Government Accountability Office, *Report to the Committee on the Judiciary, U.S. Senate, and the Committee on the Judiciary, U.S. House of Representatives, Gun Control, Implementation of the Brady Handgun Violence Prevention Act (GAO/GGD-96-22) (Washington, DC: U.S. Government Accountability Office, 1996).*

to allow for an appreciation of the sheer number of guns physically present and how they are acquired and viewed within this nation. This approach appears to be essential for adequately addressing the five central questions presented within this thesis. What follows is a brief probing and description of some of the more salient impediments to the discourse regarding gun misuse as revealed within the literature review process. This information is presented in this thesis to facilitate the reader's ability to put into context points made within the remaining body of the thesis. The areas of focus regarding the misperceptions and discourse impediments concerning gun misuse includes such issues as legal and illegal gun markets, constitutional rights considerations, the media, potential legislative obstacles, disciplinary overlaps and incongruence, and the effects of nationalism.

1. The Legal and Illegal Gun Markets Systems

A literature review is performed to gain a clearer understanding of how gun markets are structured and function. Some of the terminology and practices associated with these gun market systems are also examined. Guns are bought and sold through both legal (legitimate), as well as illegal (illegitimate) market systems. Legitimate gun markets exist within the United States and their manufacturing and distribution operations are heavily regulated. The same level of scrutiny, however, does not always appear to extend to the customer at the point of sale.¹⁹ This lack of scrutiny is particularly true when it comes to illegal gun sales markets. Some terms used to describe the illegal gun markets include the "straw," "gray" and "black" market systems defined as follows.²⁰

• STRAW MARKETS (aka, "nominee purchases") operate to sell guns to a proxy who purchases and then delivers a gun to someone unwilling or unable to purchase the weapon personally. These sales are legal if arranged for someone who would otherwise be legally entitled to make the gun purchase and who has no intention of using it for an illegal purpose. However, these sales often involve illegal activities. For example, an individual with a legal right to own a gun may purchase a gun only to sell

¹⁹ Philip J. Cook, Stephanie Molliconi, and Thomas B. Cole, "Regulating Gun Markets," *Journal of Criminal Law and Criminology* 86, no. 1 (1995): 59–92.

²⁰ Philip J. Cook, *Underground Gun Markets* (Cambridge, MA: National Bureau of Economic Research, 2005); Jack Kelly, *Gunpowder: Alchemy, Bombards, and Pyrotechnics: The History of the Explosive That Changed the World* (New York: Basic Books, 2004).

or hand it over to someone not legally entitled to purchase the gun, e.g., a convicted felon.

- GREY MARKETS (aka, "gray market" or "parallel market") involve the sale of guns via legal distribution channels that are unofficial and unauthorized or unintended for use by the gun's original manufacturer. The guns are usually sold at a cheaper price illegally and the government does not collect taxes.
- BLACK MARKETS (aka, "underground economy") operate to sell guns in an innately illegal manner outside of the formal economy and state regulatory controls. The method of sale is illegal but the actual physical gun may or may not be an illegal item itself depending upon prevailing jurisdictional laws. This process also evades the collection of required taxes.

The existence of poorly regulated legal, as well as illegal gun markets has been the bane of many within government, including the homeland security, law enforcement, and judicial system arenas. ²¹ It is important to note that legally qualified and law-abiding gun owners may also share a dim view of such illegal gun market systems. Conversely, the actions of gun ownership rights groups may also act to protect and shield the existence of these illegal gun market systems. The admixing of legal and illegal gun owners arising from these markets can represent a challenge to free and open dialogues concerning gun misuse. The literature review process now moves on to examine the relationship between the Constitution and Declaration of Independence as it relates to gun ownership and use.

2. A Balancing Act: The Constitution, Declaration of Independence, and Gun Misuse

American society appears to present itself as a place of openness, creativity and free expression. Although these traits appear to be laudable social goals, their existence may also result in heightened vulnerabilities with respect to the issue of gun misuse that

²¹ New York City Mayoral Office press release PR-428-06 December 7, 2006, in which Mayor Bloomberg warns citizens about June 2006 legislation mandating a mandatory minimum sentencing increase for illegal loaded handgun possession. Bloomberg noted, "Illegal guns don't belong on our streets and we're sending that message loud and clear... We're determined to see that gun dealers who break the law are held accountable, and that criminals who carry illegal loaded guns serve serious time behind bars." Michael R. Bloomberg, *Mayor Bloomberg Announces the Filing of Second Federal Lawsuit against Irresponsible Gun Dealers* (Press Release PR-428-06) (New York: The City of New York, 2006).

is especially true within modern asymmetrical threat environments.²² In this section, the literature review is focused upon the relationship between the Constitution and the Declaration of Independence concerning their applicability to the issues surrounding gun ownership, use, and potential misuse. The thesis attempts to determine if a clearer understanding of this relationship might provide help when attempting to confront misperceptions and impediments to discourse involving gun misuse.

A review of the literature reveals that a constitutional right to bear arms is often viewed as a Second Amendment right that should never be challenged or abridged in any manner or fashion. Any concessions are often seen as a slippery slope leading to gun owner rights erosions and infringements. For some gun owners, the Fourth Amendment protection from illegal search and seizure also appears to serve as an additional shield against what they view as the potential inappropriate confiscation of their guns. It is even true when the source of such infringements arise from what are perceived to be overbearing governmental regulatory intrusions.²³ However, the Second and Fourth Amendments were primarily born out of a response to the external threats posed by the "foreign" British government. The applicability of these constitutional amendments to internal, domestic situations seemed less clear at that point in time, as the federally-based Bill of Rights did not initially apply to the individual states.²⁴ In fact, during Andrew Jackson's Presidency (1829–1837), the first gun control laws were passed that met with immediate and fierce opposition from the states. These laws were viewed as being contrary to the individual right to gun ownership and self-defense.²⁵

²² Ori Brafman and Rod A. Beckstrom, *The Star Fish and the Spider—The Unstoppable Power of Leaderless Organizations* (New York: Penguin Group, 2006): 155–158.

²³ Philip J. Cook and James Blose, "State Programs for Screening Handgun Buyers," *Annals of the American Academy of Political Science* 455 (May 1981): 80–91, http://www.ncjrs.gov/App/Publications / abstract.aspx?ID=79101.

²⁴ Stephen P. Halbrook, "What the Framers Intended: A Linguistic Analysis of the Right to "Bear Arms," *Law and Contemporary Problems* 49, no. 1 (1986): 151–162; H.R. 2892 (111th): Department of Homeland Security Appropriations Act, August 24, 2010. Also see "15 U.S. Code Sec. 1241 (P. L. 113–86)," accessed January 12, 2014, http://www.crs.gov.

²⁵ Robert V. Remini, *Andrew Jackson* (New York: Palgrave Macmillan, 2008).

A document, commonly referred to as "The Declaration of Independence," was drafted and then subsequently adopted by the Continental Congress on July 4, 1776.²⁶ This historically critical document noted that the 13 original colonies were not only to be recognized as sovereign states but also as a newly formed nation, the United States of America. The positions presented by this thesis regarding gun misuse point to and draw support from a particularly powerful sentence within this document, "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness."²⁷

President Abraham Lincoln (Presidency 1861–1865) considered this document, which predates the Constitution, to be a foundation for his political philosophy.²⁸ On a review of the literature, he apparently felt that this document contained the principles through which the U.S. Constitution should be viewed and interpreted. President Lincoln's decision to use the Declaration of Independence as a lens with which to view the Constitution may have occurred while he reflected upon the carnage befalling the states during the Civil War (1861–1865).²⁹ This war was associated with the use of guns and munitions by one citizen against another, sometimes even dividing members within the same family. It directly threatened to dissolve the union created between the states. In *Bliss v. Commonwealth*, the absolute and unqualified right to bear arms was strongly stated by the Kentucky judiciary.³⁰ In *State v. Buzzard* (1842), the Arkansas courts affirmed the right to bear arms for free white men. However, the court noted that the intent of the Constitution was a right to bear arms for a collective, not an individual, right

²⁶ U.S. Government Printing Office, *The Constitution of the United States, with Index and the Declaration of Independence*, 25th ed. (Washington, DC: U.S. Government Printing Office, 2012).

²⁷ U.S. Government Printing Office, *The Constitution of the United States, with Index and the Declaration of Independence.*

²⁸ Merrill D. Peterson, "This Grand Pertinacity": Abraham Lincoln and the Declaration of Independence (Fort Wayne, IN: Lincoln Museum, 1991).

²⁹ Wilson Ray Huhn, "Abraham Lincoln and the Transcendental Constitution: Excerpts from Lincoln's Letters, Speeches, and Remarks (Annotated)," *SSRN Electronic Journal* (2010); Lee J. Strang, "Originalism, the Declaration of Independence, and the Constitution: A Unique Role in Constitutional Interpretation?" *SSRN Electronic Journal* (2005).

³⁰ Bliss v. Commonwealth, 12 Ky. (2 Litt.) 90, 13 Am. Dec. 251 (1822).

to protect the state.³¹ A challenge to this view barring the individual right to bear arms arose in the Antebellum era with the *Dred Scott v. Sanford*, 60 U.S. 393 (1857) decision.³² The judiciary was confronted with disarming black men, both free and former slaves, within the states leading up to the Civil War (1861 to 1865). In effect, it would deprive all black men, even if considered to be free, of a constitutional right to bear arms and of individual gun ownership. The court, however, ruled that Dred Scott was not a citizen, and therefore, was unable to gain his freedom, as well as the right to individual gun ownership, through federal court proceedings. The Constitutional Second and Fourth Amendment rights protections apparently did not apply, as he was not considered to be a legal citizen by the Supreme Court. This event occurred prior to President Lincoln's Executive Order of the Emancipation Proclamation of January 1, 1863 and the passage of the Thirteenth Amendment abolishing slavery.³³

Despite the historical precedents noted, the Chicago Saint Valentine's Day massacre executed by machine-gun wielding gangsters led directly to the enactment of the National Firearms Act (NFA) of 1934.³⁴ This Act placed fully automatic weapons under the control of the Bureau of Alcohol Tobacco and Firearms (ATF).³⁵ The earlier dichotomy of individual versus collective gun ownership rights presented in Dread Scott was settled in 2008 by the U.S. Supreme Court decision in *District of Columbia v. Heller*.³⁶ According to O'Shea, in this case, the majority opinion of Justice Scalia defined "originalism" as relating to "original public," and upheld the individual right to gun

^{31 &}quot;State v. Buzzard, 4 Ark. (2 Pike) 18 (1842)," accessed May 12, 2013, http://www.constitution.org/2ll/2ndcourt/state/191st.htm.

³² Supreme Court Decision: Scott v. Sandford, 60 U.S. 19 How. 393 (1856).

³³ David Livingstone, "The Emancipation Proclamation, the Declaration of Independence, and the Presidency: Lincoln's Model of Statesmanship," *Perspectives on Political Science* 28, no. 4 (1999): 203–10; Nicholas Johnson, *Negroes and the Gun: The Black Tradition of Arms* (Amherst, NY: Prometheus Books, 2014).

³⁴ United States Congress, Senate, *Amend the National Firearms Act, Approved June 26, 1934: Report (to Accompany S. 1905)* (Washington, DC: U.S. G.P.O., 1937); see also U.S. Internal Revenue Service, *National Firearms Act, and Federal Firearms Act* (Washington, DC: U.S. Internal Revenue Service, 1957).

³⁵ Miller, *The Social History of Crime and Punishment in America: An Encyclopedia*; Bureau of Alcohol, Tobacco, Firearms and Explosives: Office of Enforcement Programs and Services, Firearms Programs Division, *Federal Firearms Regulations Reference Guide* (AT United States Constitution F Publication 5300.4) (Washington, DC: United States Department of Justice, 2005).

³⁶ "Supreme Court Decision: District of Columbia v. Heller, (No. 07–290) 478 F. 3d 370, affirmed (2008)," accessed May 12, 2013, http://www.supremecourt.gov.

ownership. However, in the dissent, O'Shea notes that Justice Stevens interpreted the Second Amendment term more traditionally as relating to the intent of the Founders, a collective right to gun ownership.

The Fourteenth Amendment of the Constitution, adopted on July 9, 1868, afforded equal protection under the laws. It included within its drafting the first eight amendments, also known as, "The Bill of Rights," as suggested by Representative John A. Bingham.³⁷ This view was later challenged in the *Spies v. Illinois* case.³⁸ The court held that the Fourteenth Amendment rights and immunities clause did not serve to vitiate or restrict national governmental powers. Rather, in effect, it guarded the amendments against potential state legislative action and challenges.

This thesis suggests that the Fourteenth Amendment equal protection clause, as well as President Lincoln's Declaration of Independence lens, would seem to apply to, and support the need for, public safety and security when it comes to gun misuse. In this instance, the Second, Fourth, and Fourteenth Amendments constitutional rights protections would appear to extend to the potential victims of gun misuse as well.

A recent national poll was conducted just after the Sandy Hook elementary school AK 47 assault rifle massacre of 22 children. In the poll, over 90% of American citizens, which included some NRA members, supported stricter state and national gun control laws. ³⁹ An emotional element in response to the Sandy Hook massacre may have existed during the polling period that tended to sway public opinion towards a view supportive of tighter gun control laws. Yet, despite this overwhelming national polling result in favor of stricter gun control measures, pro-gun efforts apparently prevailed in both the legal and legislative arenas. Public sentiments were apparently pushed aside as U.S. congressional legislation calling for stricter gun regulations was summarily defeated. ⁴⁰

³⁷ Leonard Levy, *Fourteenth Amendment and the Bill of Rights: The Incorporation Theory* (American Constitutional and Legal History Series) (Cambridge, MA: Da Capo Press, 1970).

³⁸ "Supreme Court Decision: Spies v. Illinois, 123 U.S. 131 (1887)," accessed May 17 2013, http://www.supremecourt.gov.

³⁹ Kevin H. Wozniak, "Public Opinion about Gun Control Post-Sandy Hook," *Criminal Justice Policy Review*, 2015.

⁴⁰ James C. McKinley Jr., "In Texas School, Teachers Carry Books and Guns," *The New York Times*, August 28, 2008, http://www.nytimes.com/2008/08/29/us/29texas.html?ei=5070&emc=eta.

Andrew Jackson, reflecting upon the attempt at nullification of the Union, just after the War of 1812 noted, "[The Constitution] ... forms a government, not a league... It is a government in which all the people are represented." Perhaps the legislative response is reflective of the degree to which unrestricted gun ownership rights are still deemed to be an essential and indispensable part of American life. It also appears that this result was achieved at the very price of justifying and supporting the wishes of just such a pro-gun ownership "league" of sorts as warned against by President Jackson. The preservation of both citizen representation and gun owner rights is a fundamental assurance provided by this government, as is its duty to protect this nation's citizens from gun misuse harm. It appears that in this circumstance, a correct balance between liberty and security must be struck.

Dahl notes that a RAND study points out that usually the balance between security and liberty is reestablished after a security crisis has been resolved. He further notes that, what is new is that this balance has not been restored since the attacks of 9/11 and may be shifting towards greater governmental power.⁴² Dahl also warns of a need to further explore the implications of a "decentralized and de facto domestic intelligence enterprise" that has had successes but "teeters on the brink of civil liberties infringement." Keeping Dahl's views in mind, it would seem to imply that even the background check of a prospective gun owner may increasingly come to be viewed by pro-gun rights supporters as a coercive and intrusive attempt at further "gun control" by governmental authorities. Perhaps the legislative and legal hesitancy to impose further restrictions, and even a weakening of the grip of existing gun control laws, is also reflective of the perceived need for a similar rebalancing between security and liberty as noted by Dahl. The onus is then increasingly placed upon the government to explain why the granting of a gun license to any potential gun ownership applicant should be denied. That is, while simultaneously being viewed as potentially overstepping the intended reach of governmental power and authority with respect to gun ownership rights.

⁴¹ Jon Meacham, *American Lion: Andrew Jackson in the White House* (New York: Random House LLC, 2008): 228.

⁴² Erik Dahl, "Domestic Intelligence Today: More Security but Less Liberty?" *The 9/11 Essays. Homeland Security Affairs*, vol. 7, The 9/11 Essays (September 2011): 4–5. WWW.HSAJ.ORG.

Dahl also notes that the nationwide suspicious activity reporting initiative may in fact curtail terrorist and criminal activities, but at the price of a loss of civil liberties. This view would tend to support the concerns raised by gun owners involving the potential for gun owner privacy rights infringements by governmental overregulation and overreach. Further support is garnered for this viewpoint in an article, "What's Wrong with Fusion Centers—Executive Summary."⁴³ In this article, the American Civil Liberties Union (ACLU) warns that proper legal limits must still be used to guard against the undermining of fundamental American values when utilizing the information gathered within fusion centers. Shipler notes that it is important to address the concerns arising from potential Second Amendment constitutional rights infringements and legal challenges to the use of information related to private citizens. Shipler states:

Government snooping destroys the inherent poetry of privacy, leaving in its absence the artless potential for oppression. ... Even where government is benign and well-meaning—a novelty that neither James Madison nor Tom Paine imagined—the use of everyday information about someone's past to predict his behavior can lead to obtrusive mistakes known in the jargon as "false positives." Worse ... when courts and legislatures retreat and fail to check and balance ... the vacuum they leave will be filled by expanding executive authority.⁴⁴

Shipler went on to note that while attempting to place crime detection "shot-spotter" systems—that can triangulate and locate gunshot sounds within 10 to 20 feet of their origin—in Los Angeles and Oakland, the technicians were fired upon by gang members who attempted to block their installation. However, this thesis points out that Shipler also appears to dismiss such needed efforts in a somewhat cursory manner by stating, "Law enforcement has enough difficulty finding who committed a crime in the past, much less predicting who will commit one in the future."⁴⁵ Shipler went further, noting that in another situation, "The police ... many of whom were untrained ... listed as gang members [in the GangNET website database] more than 66 percent of all the black

^{43 &}quot;What's Wrong with Fusion Centers—Executive Summary," December 5, 2007, http://www.aclu.org/technology-and-liberty/whats-wrong-fusion-centers-executive-summary.

⁴⁴ David K. Shipler, *The Rights of the People—How Our Search for Safety Invades Our Liberties* (New York: Vintage Books, Random House, 2011): 295.

⁴⁵ Ibid.

males in Denver between the ages of 12 to 24 years old, and 47 percent in Los Angeles."⁴⁶ Shipler conveys that such information, even if erroneous, cannot only directly impact any subsequent issues of litigation but may also serve to block the affected individual from securing gainful future employment. It appears that unchecked actions of this type can result in unintended citizen harm, as well as potential constitution-based rights infringements. Consistent with this view, some gun owners fear that gun registration information might be used for what they consider to be intentional and inherently illegal governmental actions against them in the future.

Yet, criminal and terrorism-related activities representing a threat to the public need to be addressed, particularly under circumstances involving intentional acts of violence involving gun misuse. In contrast to Shipler's views on governmental intrusions, the Committee on Homeland Security in a report on the federal mishandling of a 2007 Multi-Drug Resistant Tuberculosis (XDR-TB) incident directly questioned the need to avoid individual constitutional rights infringements.⁴⁷ The case involved an attorney who refused Center for Disease Control and Prevention (CDC) directives not to travel while potentially contagious. Gostin notes, a potential existed for public harm based on this individual's choice not to comply with medical recommendations.⁴⁸ The report pointed to the very need for governmental power to intrude at times regarding public safety and security concerns. The report also noted that due to this apparent public safety lapse, "All departments and agencies must identify the lessons they observed and learned, and describe how they intend to overcome the glaring inefficiencies and weak points in their systems and organizations."

⁴⁶ Ibid.

⁴⁷ Committee on Homeland Security, *The 2007 XDR-TB Incident: A Breakdown at the Intersection of Homeland Security and Public Health* (Washington, DC: U.S. House of Representatives, Committee on Homeland Security, 2007); see also World Health Organization, *Multidrug and Extensively Drug-resistant TB (M/XDR-TB): 2010 Global Report on Surveillance and Response* (Geneva, Switzerland: World Health Organization, 2010).

⁴⁸ David P. Fidler, Lawrence O. Gostin, and Howard Markel, "Through the Quarantine Looking Glass: Drug-Resistant Tuberculosis and Public Health Governance, Law, and Ethics," *The Journal of Law, Medicine & Ethics* 35, no. 4 (2007): 616–628.

⁴⁹ Ibid.

Such an unchecked liberty on the part of this potentially contagious individual appears to have directly threatened the public safety and security from a health perspective. This situation brings to light several important questions that this thesis views as being pertinent to the issue of gun misuse. By overly supporting individual gun ownership rights protections, is the line crossed with respect to general public safety and security protection rights ensured by the government? Specifically, is the right of the individual gun owner greater than the public safety and security rights when the potential consequence is injury or death? Conversely, would approaches to gun misuse prevention be viewed as yet another attempt at governmental overreach resulting from an unbalanced expansion of governmental authority as noted by Dahl? It appears that the answer to such questions involve a balancing of the rights to individual gun ownership and use and the degree of potential public harms resulting from gun misuse, as liberty is also in the balance.

Despite these diametrically opposing views on the need for government involvement, it appears that people cannot allow the issue of gun misuse to simply sink within the quagmire of a Constitution rights-based, zero-sum game. Yet, it still must be determined to what degree the government agencies involved have a duty to safeguard the public and to resolve the issues surrounding gun misuse. Expansions of apparent executive authority overreach might also potentially work to further erode public trust in addition to constitutionally protected civil liberties and rights. It is particularly true when the rights to gun ownership, that are held to be so basic by some gun supporters, are being examined by the government itself. The use of an interdisciplinary approach that includes healthcare workers, who tend to elicit a higher degree of public trust, may garner greater public support for approaches involving traditional governmental operatives.⁵⁰

Gun owners, in addition to constitutional rights arguments, may further support their position by noting that they have a dire need for gun possession for self-defense. That is, to protect themselves and family members against criminal activities and civil

⁵⁰ David Mechanic, "The Functions and Limitations of Trust in the Provision of Medical Care," *Journal of Health Politics, Policy and Law* 23, no. 4 (1998): 661–686; see also Richard Foley, *Intellectual Trust in Oneself and Others* (Cambridge, UK: Cambridge University Press, 2001).

unrest without governmental privacy intrusions.⁵¹ This scenario may be especially true when gun owners perceive the government as being incapable of adequately and effectively protecting them from the consequences of criminal activities and civil unrest. The adoption of such a viewpoint by gun owners may also serve to further immerse and entrench them within an unbalanced gun-centric cultural perspective. Albert Einstein, reflecting upon the aftermath of WWII, warned, "We may have vanquished an external enemy, but have been incapable of getting rid of the mentality created by the war. It is impossible to achieve peace as long as every single action is taken with a possible future conflict in view."⁵²

Einstein seems to be suggesting that something different is occurring in addition to the balancing act between security and liberty. He seems to intimate that a constant consciousness of people arming themselves with the mentality of war may provide for the loss of liberty and a sense of tranquility and peace in itself. This thesis suggests that this deprivation noted by Einstein would similarly stem from the social climate created by the repercussions of unchecked gun misuses, as well as a mentality based upon a persistent gun-centric cultural climate. Similar to President Lincoln, Einstein's perspective would seem to involve viewing the constitutional protections through the lens of the Declaration of Independence. Both Einstein's and Lincoln's views lend support to the need to address gun misuse to assure the existence of public peace, tranquility and the pursuit of happiness.

A slippery slope may also occur when it comes to balancing liberty with safety and security. Consistent with Shiplers' views, the possibility exists that a constant safety and security, gun misuse-monitoring environment by the government may result in the establishment of a de facto "police state" with a similar loss of a sense of peace, tranquility, and happiness. However, a lack of sufficient government intervention that provides for gun misuse prevention would appear to be potentially equally detrimental to the public. A lack of government involvement might lead to the further erosion and

⁵¹ Jennifer Carlson, "The Right to Self-Defense, the Duty to Protect," *Citizen-Protectors The Everyday Politics of Guns in an Age of Decline*, 2015, 85–113.

⁵² Albert Einstein, *Ideas and Opinions* (New York: Three Rivers Press, Crown Publishing, 1954): 160.

potential loss of the "inherent poetry," of which Shipler speaks. This situation includes the possible de-facto creation of a defensive, gun-centric mentality associated with the loss of public peace, happiness, and tranquility. This thesis adds to the content of Shipler's statement, "leaving in its absence the artless potential for" *a public form of self-imposed* "oppression." This viewpoint is consistent with Einstein's view concerning the maintenance of a consciousness of war. It appears that these opposing views tend to support Dahl's concerns that a proper balance between security and liberty be established.

It is noted in the Department of Homeland Security (DHS) Strategic Plan (FY12–16) that,

Objective: Increase information sharing with federal, state, local, territorial, tribal, non-governmental, private sector, and international partners ... Enhance the Department's ability to collect, gather, and access relevant information in near-real time, and use it to identify people, goods and conveyances posing a high risk to the Homeland while protecting privacy, civil rights, and civil liberties.⁵³

Upon a reading of the literature, it seems to imply not only that a balance between liberty and safety and security be established, but the need for the creation of a new paradigm for interdisciplinary collaboration. A shift in terminology from "gun control" to "gun misuse prevention" may facilitate the process by providing a more expansive view of the issues surrounding gun misuse. It may be especially helpful when cross-disciplinary collaboration is required to view the legal and constitutional gray zone issues involving instances of accidental shootings and suicide. In this instance, the healthcare system may provide a safety valve of sorts by rendering mental health, as well as physical care, to those involved in these forms of gun misuse. It involves the placement of a focus on peace, tranquility, happiness, and the assurance that justice is served. The thesis now turns to what if any influences the media may have when it comes to gun ownership, use, and misuse.

⁵³ Department of Homeland Security, *Department of Homeland Security Strategic Plan, Fiscal Years* 2012–2016 (Washington, DC: Department of Homeland Security, 2012), http://www.dhs.gov/xlibrary/assets/dhs-strategic-plan-fy-2012-2016.pdf; Office of Inspector General, *DHS' Counterintelligence Activities (Summary)* (Washington, DC: Department of Homeland Security, 2010).

3. Gun Use and the Media

The literature review appears to indicate that an additional impediment to dialogue often originates within the realm of the media. The media seems to have played a major role in shaping the nation's cultural views on the issues surrounding gun ownership and use, including instances of misuse. From the telegraph and newspapers to movies, television and now the multimedia-based internet, the use of guns has apparently been both glorified and vilified within the context of the American cultural experience. At times, media portrayals of gun-related assaults and homicides appear to transcend and cast a formidable shadow on American life.⁵⁴ Gun use has also been idolized within the media through its genres of cowboy, military, and glorified gangster movies.⁵⁵ Guns are depicted as the trump cards for both villains and heroes alike. The borderlines between villains, vigilantes, and heroes are often obscured by the use of propagandized narratives that either idolize or vilify a given individual with a gun.⁵⁶ Upon performing this literature review, it appears that within the realm of media sensationalism, emotionalism all too often trumps rational thought when it comes to gun misuse. It would also appear that it would then tend to obscure or serve to block a logical, effective, and open dialogue aimed at ensuring gun misuse prevention.

The media often tends to distort and obscure in a negative light the existing protections offered by the underlying legal, healthcare, and homeland security disciplines.⁵⁷ Such portrayals may obscure the daily beneficial steps taken by this nation to protect the public from potential, as well as actual instances of gun misuse. It also potentially shakes public confidence and trust in the ability of the involved disciplines to

⁵⁴ Christopher J. Ferguson and John Kilburn, "The Public Health Risks of Media Violence: A Meta-analytic Review," *Journal of Pediatrics* 154, no. 5 (2009): 759–763.

⁵⁵ Richard Rattenbury, *The Art of American Arms Makers: Marketing Guns, Ammunition and Western Adventure during the Golden Age of Illustration* (Oklahoma City, OK: National Cowboy & Western Heritage Museum, 2004).

⁵⁶ Sissela Bok, *Mayhem: Violence as Public Entertainment* (Reading, MA: Addison-Wesley, 1998); see also George de Stefano, "Don Corleone Was My Godfather," in *An Offer We Can't Refuse: The Mafia in the Mind of America* (New York: Faber and Faber, 2006), 94–135; James Chapman, *Licence to Thrill: A Cultural History of the James Bond Films* (New York: I. B. Tauris, 2009).

⁵⁷ David Morrell, *First Blood*, 1st ed. (Lanham, MD: M. Evans, 1972). (Basis for the "Rambo" series of films).

develop reasonable and effective approaches to gun misuse. Media presentations involving guns must also be tempered by an understanding of what specific contextual roles guns are playing in a given situation and time period.⁵⁸ This concept is especially true for a society espousing the right to the freedom of expression and the unalienable rights of gun ownership. In fact, calls and attempts to remove media representations of guns from the virtual world would appear to be just as daunting a task as trying to remove actual guns from the physical landscape of this nation.

Within the current media-driven social environment, the public now has access to more local, national, and global information than ever before concerning the daily misuses of guns. The literature review appears to support the view that the media has a tendency to project blazing images of gun misuse occurrences that powerfully dwell in the present. Nevertheless, it appears that these images only tend to fade from consciousness into obscurity within the very next moment. That is, without a viable and effective solution for the occurrence of gun misuse being brought to light. Further, the literature seems to support the notion that unless an individual blatantly violates human rights-based laws and rules, the detection of gun misuse violations largely goes unnoticed in the media stream. Potentially dangerous media-driven ideological views surrounding the use of guns also seem to freely filter through the constitutional meshwork. These seemingly harmful ideological views pass through the cracks and pores of individual "right to bear arms," "search and seizure," and "free speech" protections.⁵⁹ This tendency may result in additional impediments to discourse based on media-driven perspectives and misrepresentations concerning gun misuse. Yet as noted previously, attempts to censor the general media stream by removing such ideology-based images would most likely represent a formidable task.

⁵⁸ Michael R. Gardner, *Harry Truman and Civil Rights: Moral Courage and Political Risks* (Carbondale and Edwardsville, IL: Southern Illinois University Press, 2002); Jason Meisner, "Alleged Gunman in Hadiya Pendleton Slaying Was on Probation for Weapons Conviction," *Chicago Tribune*, February 12, 2013; Erin Donaghue, "George Zimmerman Trial: Jury May Consider Lesser Charge of Manslaughter, Judge Rules," *CBS News*, July 11, 2012, http://www.cbsnews.com/news/george-zimmer man-trial-jury-may-consider-lesser-charge-of-manslaughter-judge-rules/.

⁵⁹ Michael Kent Curtis, Free Speech, "The People's Darling Privilege": Struggles for Freedom of Expression in American History (Durham, NC: Duke University Press, 2000).

Nonetheless, it appears that the literature review might also serve to support gun misuse prevention approaches from a media-driven perspective as well. The media has also played a positive role with respect to addressing violent acts and gun misuse. 60 It appears that the media has the potential to present strongly stated counter-narratives directed against gun misuse and violence. In February 1946, Sergeant Isaac Woodard, an African American soldier in uniform, was just returning from WWII overseas duty and was riding on a Greyhound bus. 61 Two armed white police officers arrested him, one of them blinding Woodard by gouging his eyes with a nightstick. He was assaulted just for asking to use a bus restroom marked for whites only. Orson Wells dedicated an entire radio program broadcast noting his outrage at this injustice, as did many other white Americans.⁶² In this case, the media worked to confront a blatant social injustice that helped to galvanize the collective opinion of a diverse group of American citizens. Representative John Lewis (D-GA), a civil rights leader who led the "Bloody Sunday" march in Selma and worked with Martin Luther King, Jr., once noted, "The civil rights movement would have been like a bird without wings if it hadn't been for the news media."63

The literature also reveals that the media portrayals of instances involving gun use often seem to stem from varied and polarized ideological viewpoints that include legal and constitution-based "right-to-bear arms," as well as anti-gun advocacy perspectives. On a global scale, the mass media interconnects diverse communities without apparent regard for the consequences of admixing very different cultural perspectives and values concerning the ownership and use of guns. Recent global perspectives have also

⁶⁰ Judith M. Sgarzi and Jack McDevitt. *Victimology: A Study of Crime Victims and Their Roles* (Upper Saddle River, NJ: Prentice Hall, 2003).

⁶¹ John Lewis Gates, "Portrayal of the Life of Isaac Woodard in Film Series Entitled "African Americans: Many Rivers to Cross," Episode, "Rise! (1940–1968)," Public Broadcasting System (PBS), 2013.

^{62 &}quot;1946 Orson Welles Commentaries," 2007, https://archive.org/details/1946OrsonWellesCommentaries/Dec 19, 2007.

⁶³ David Treadwell, "Journalists Discuss Coverage of Movement: Media Role in Civil Rights Era Reviewed," *Los Angeles Times*, April 5, 1987.

challenged U.S. domestic gun use-related policies and practices.⁶⁴ At the same time, potential viable solutions for resolving conflicting polarized views concerning the use of guns are seemingly rarely offered or even earnestly pondered within the realm of the media. The social circumstances leading to gun-related misuses often appear to be both intrinsically and inextricably enmeshed within the very fabric of American life.⁶⁵ The term "gun culture," popularized by Richard Hofstadter, clearly notes the linkages between gun ownership and American cultural identity.⁶⁶ The thesis now turns to examine a congressional ban imposed upon attempts to perform research related to gun violence conducted by the CDC.

4. A Governmental Ban on Gun Misuse Research

It appears that a congressional legislative ban on gun misuse prevention research may be serving as an impediment to public discussions and academic discourse as well. A literature review concerning this issue was performed to discern the implications, if any, of this legislative ban on gun misuse prevention research.

In 1996, Congress prohibited the CDC from conducting gun injury prevention research. Congress noted it was a "politically motivated" attempt at "gun control" by the CDC.⁶⁷ Congress noted, "none of the funds made available for injury prevention and control at the Centers for Disease Control and Prevention may be used to advocate or promote gun control."⁶⁸ This very language, blocking scientific research concerning

⁶⁴ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Rates of Homicide, Suicide, and Firearm-Related Death among Children—26 Industrialized Countries," *MMWR Weekly* 46, no. 5 (1997): 101–105, http://www.cdc.gov/mmwr/preview/mmwrhtml/00046149.htm.

⁶⁵ Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies* (New York: W. W. North & Co., Ltd., 1999).

⁶⁶ Richard Hofstadter, *The American Political Tradition and the Men Who Made It* (New York: A. A. Knopf Publishing, 1948), see also Michael A. Bellesiles, *Arming America: The Origins of a National Gun Culture* (New York: Alfred A. Knopf, 2000).

⁶⁷ Making Omnibus Consolidated Appropriations for the Fiscal Year Ending September 30, 1997, and for Other Purposes, Pub. L. No. 104–208, 110 Stat, 3009–244 (1996). Prohibits the CDC from spending funds to conduct gun control research; see also Illinois General Assembly, Federal Funds to State Agencies, FY 2006–2008.

⁶⁸ Ibid.

guns, also appeared in the 2012 and 2013 congressional appropriation bills.⁶⁹ At that point in time, the visionary work done under the CDC's National Center for Injury Prevention and Control (NCIPC) run by Mark Rosenberg, which included the works of Dr. Arthur Kellerman at Harvard University, came under fire. They were scrutinized and targeted by various gun-rights advocacy groups.⁷⁰ Apparently, pro-gun lobby groups were able to influence the development of legislative policy decisions favorable to their positions in this regard. Legislation was enacted although these policies were often, according to national polls, contradictory to the wishes of the majority of the American public, as well as some gun owners.⁷¹ That is, with respect to their views on the need for increased safety and security surrounding gun ownership, handling, and usage. This legislation acted as a concrete impediment to discourse regarding gun misuse on a practical, as well as scientific level.

This congressional legislative enactment also stands in contradistinction to earlier judicial comments made by Ex-Chief Justice Warren Burger in 1990. Burger noted:

Americans also have the right to defend their homes, and we need not challenge that...the Constitution protects the rights of hunters [to own] guns...fishing rods and automobiles...To "keep and bear arms" for hunting today is essentially a recreational activity and not an imperative of survival, as it was 200 years ago. "Saturday night specials" and machine guns are not recreational weapons and surely are as much in need of regulation as motor vehicles.⁷²

⁶⁹ Christine Jamieson, "Gun Violence Research: History of the Federal Funding Freeze." PsycEXTRA Dataset. doi:10.1037/e521422013-003.

⁷⁰ Arthur L. Kellermann, "Obstacles to Firearm and Violence Research," *Health Affairs*, 12, no. 4 (1993): 142–153, doi:10.1377/hlthaff.12.4.142; U.S. Department of Health and Human Services, Public Health Service, *Homicide Surveillance: High-Risk Racial and Ethnic Groups—Blacks and Hispanics*, 1970 to 1983 (Atlanta, GA: Centers for Disease Control and Prevention, 1986); see also Robert J. Blendon, John T. Young, and David Hemenway, "The American Public and the Gun Control Debate," *JAMA* 275, no. 22 (1996): 1719–1722.

⁷¹ Paul Miller, "Chicago's Deadly Gun Control Lessons; Children Die despite Draconian Laws," *The Washington Times*, February 11, 2013, http://www.highbeam.com/doc/1G1-318352363.html; William A. Darity, *International Encyclopedia of the Social Sciences*, 2nd ed. (Detroit, MI: Macmillan Reference USA, 2008).

⁷² Kermit L. Hall, ed., *The Oxford Companion to the Supreme Court of the United States* (New York: Oxford University Press, 1992): 122–124; see also Frank Luntz, "Gun Owners Support Some Controls; Pro-Second Amendment Isn't Anti-Safety," *The Washington Times*, August 10, 2012, http://www.highbeam.com/doc/1G1-299255856.html.

Perhaps reasoned changes in individual and collective viewpoints are possible over time. Upon literature review, it appears that judicial and legislative incremental changes will most likely be required to parallel these shifting public viewpoints, as well as the implementation of devised gun misuse prevention approaches. Strong lobby groups on either side of the debate polarization, however, appear to represent an impediment to discourse.

Private sector industry also seems to have a role to play alongside legal, homeland security, and healthcare efforts in addressing gun misuse prevention, as it did with respect to seatbelt use in crash-related injury prevention programs. This thesis now turns to some of the overlapping elements that comprise existing approaches to gun misuse. Each of these elements has specific but sometimes overlapping or even conflicting goals among the law enforcement, homeland security, and healthcare disciplines as noted in the next section.

5. Approaches to Gun Misuse and Disciplinary Conflation

On the surface, a possible conflation of overlapping roles and responsibilities involving the homeland security, legal, and healthcare disciplines concerning gun misuse appears to exist. A literature review was performed and directed at how these roles and responsibilities are structured with respect to disciplinary approaches to gun misuse. This review includes an analysis of specific disciplinary roles and responsibilities with respect to prevention, response, mitigation, regulatory compliance, and enforcement efforts.

Differences exist in what each discipline perceives its specific roles and responsibilities are with respect to these efforts.⁷³ It may be an especially relevant issue with respect to the operations within the DHS, as multiple disciplines are apparently operating within the same departmental structure. Although this thesis views the DHS

⁷³ Department of Homeland Security, *National Strategy for Homeland Security* (Washington, DC: Department of Homeland Security, 2007); Department of Homeland Security, *National Response Framework* (Washington, DC: Department of Homeland Security, 2008); "Commission on Accreditation for Law Enforcement Agencies (CALEA)," accessed March 12, 2013, http://www.calea.org; "Legal Framework Guidelines," accessed March 12, 2013, http://www.lexis/nexis.org; "Occupational Medicine Practice Framework Guidelines," accessed March 12, 2013, http://www.acoem.org; "Medical Practice Framework Guidelines," accessed March 12, 2013, http://www.ama.org.

from the vantage point of being a single entity for simplicity, the literature review reveals that it is essentially an admixture of multiple agencies.⁷⁴ Each component agency has its own historical views predating the 9/11 terrorist attacks regarding what its roles and responsibilities are with respect to gun misuse. This overlapping of the various agencies within the DHS is continuously forcing them to confront the rebalancing of the various roles and responsibilities with which each individual agency is tasked.⁷⁵ Although this process has not always resulted in an apparent success story, the literature indicates that apparently some notable gains have been made. Apparent inter-departmental redundancies also have implications for organizational restructuring of each component agency with potential fiscal, as well as operational consequences. Thus, the discourse between the various agency components tends at times to be strained at best.⁷⁶

Multiple disciplines exist within the health care and legal systems just as within the DHS.⁷⁷ However, these disciplines have apparently not been required to form quite such an amalgamation as has occurred with various agencies the formation of the DHS after 9/11. Despite the obvious disciplinary ties to gun misuse, an adequate and uniform framework for evaluating the integration of the various disciplinary approaches to gun misuse is apparently still lacking within the reviewed literature. The thesis now turns to international comparisons regarding gun handling and usage. A purely nationalist view may tend to obscure what lessons can be gleaned from other nations concerning

⁷⁴ Michael McGuire and Chris Silvia, "The Effect of Problem Severity, Managerial and Organizational Capacity, and Agency Structure on Intergovernmental Collaboration: Evidence from Local Emergency Management," *Public Administration Review* 70, no. 2 (2010): 279–288.

⁷⁵ Susan Page Hocevar, Gail Fann Thomas, and Erik Jansen, "Building Collaborative Capacity: An Innovative Strategy for Homeland Security Preparedness," *Advances in Interdisciplinary Studies of Work Teams* 12 (2006): 255–274.

⁷⁶ U.S. Government Accountability Office, *Report to the Chairman, Subcommittee on Emerging Threats and Capabilities, Committee on Armed Services, U.S. Senate: Homeland Security, DHS Needs a Strategy to Use DOE's Laboratories for Research on Nuclear, Biological, and Chemical Detection and Response Technologies* (GAO-04-653) (Washington, DC: U.S. Government Accountability Office, 2004).

⁷⁷ Michael Shally-Jensen and Marylane Wade Koch, *Careers in Healthcare* (Ipswich, MA: Grey House Publishing/Salem Press, 2014); Ellen Flint, *Legal Careers: Do Your Future Justice* (Ultimo, N.S.W.: Career FAQs, 2007).

approaches to gun misuse.⁷⁸ Nationalism may also tend to block further discourse regarding international comparative approaches to gun misuse.

6. Nationalism: A Potential Impediment to Gun Misuse Discourse

The thesis explores whether nationalism fosters misperceptions and creates impediments to international discourse regarding approaches to gun misuse. If so, nationalism might serve to impede the viewing and subsequent adoption of effective approaches used by other nations when confronting gun misuse. In particular, the approaches to gun misuse within Canada, the United Kingdom, and Australia are probed and explored by way of an inductive literature review and analysis process.

Among the 26 affluent nations studied, the United States has the highest gunrelated death rates, which includes homicides, accidental shootings and suicides.⁷⁹ The United States was also noted to have the highest rate of gun ownership per capita, the least restrictive firearms laws, and a very permissive firearms purchasing policy framework.⁸⁰ Further research appears to be needed to determine whether a cause and effect relationship between the total number of guns present and the total number of homicides occurring exists. U.S. statistics seem to at least put into question pro-gun policies that support the notion that the presence of more guns would necessarily translate into a higher degree of public safety and security.

⁷⁸ "Guns in Canada: Facts, Figures and Firearm Law," accessed May 19, 2013, http://www.gun policy.org/firearms/region/Canada; see also "About GunPolicy.org and Gun Policy News," accessed May 19, 2013, http://www.gunpolicy.org/about; "Sydney School of Public Health," accessed May 19, 2013, http://www.health.usyd.edu.au/; Shelley Mika, "Britons Aim for Tougher Gun Laws," Gallup, June 21, 2005, http://www.gallup.com/poll/16990/britons-aim-tougher-gun-laws.aspx. (Gallup poll results.)

⁷⁹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Rates of Homicide, Suicide, and Firearm-Related Death among Children—26 Industrialized Countries."

⁸⁰ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Rates of Homicide, Suicide, and Firearm-Related Death among Children—26 Industrialized Countries"; see also Gordon Barclay, Cynthia Tavares, and Arsalaan Siggique, "International Comparisons of Criminal Justice Statistics, 1999," *Home Office Statistical Bulletin*, no. 6/01 (May 2001), http://www.homeoffice.gov.uk/rds/pdfs/hosb601.pdf; "Guns in the United States: Facts, Figures and Firearm Law," accessed May 16, 2013, http://www.gunpolicy.org/firearms/region/united-states.

For U.S. children less than 15 years old, the firearms-related death rate is 12 times that of the other 25 industrialized nations studied combined.⁸¹ Yet, in an international poll, the respondents called for stricter gun control laws in the United States (52%), Canada (59%), and the United Kingdom (UK) (79%).⁸² Note that a greater call for more gun control was made by those in the United Kingdom despite it having the strictest gun control laws and lowest number of per capita guns of the three countries noted. A modified tabular presentation of the international comparison data of the issues surrounding gun misuse appears in Table 1.

In another study concerning the need for greater gun regulation, the one demographic consistent across the United States, the United Kingdom, and Canada was gender. A poll revealed that women supported the need for stricter gun controls more than men, as noted in Table 2.

⁸¹ Matthew Miller and David Hemenway, "Guns and Suicide in the United States," *New England Journal of Medicine* 359, no. 10 (2008): 989–991; see also Charles L. Rich et al., "Guns and Suicide: Possible Effects of Some Specific Legislation," *The American Journal of Psychiatry* 147, no. 3 (1990): 342–346.

⁸² Mika, "Britons Aim for Tougher Gun Laws."

Table 1. Firearm-related Death Rates—A Modified Data Presentation⁸³

Country	Total	Homicide	Suicide	UH	UHC	Ref#	G100/ Rank
United	10.3	3.06	6.30	0.30	0.10	55	94.1/1
States							
(2011)							
United	0.25	0.04	0.18	0.01	0.02	55	6.2/8
Kingdom							
(2010)							
Canada	2.38	0.50	1.79	0.08	0.01	55	30.8/13
	Mixed	(2009)	(2006)	(2001)	(2006)		
Australia	1.06	0.13	0.73	0.07	0.13	56	15.0/42
(2010)							

A comparative analysis of 75 nations for governmental gun control policy effectiveness; four countries are presented for review in a modified tabular format: the United States, United Kingdom, Canada, and Australia; UH = Unintentional (Accidental) Homicides, UHC = Undetermined Homicide Cause, G100 = number of guns (per 100,000 population); Rank = international ranking amongst industrialized nations for the prevalence of guns; Ref # = thesis citation source reference number.

Table 2. Bloomberg Gallop Poll Survey Conducted of Those Feeling Stricter Gun Control Laws Are Needed by Country and Gender⁸⁴

Country	United Kingdom	Canada	United States		
Women	84%	67%	63%		
Men	73%	50%	40%		

"Gallup Poll Sample Size: U.S. (1,005); Canada (1,006); UK (1,012) with 95% confidence maximum margin of sampling error is +/- 3 percentage points. In addition to sampling error, question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of public opinion polls."

Upon this backdrop, the next section of this chapter (Headings C, D, and E) turns to the exploration of approaches to gun misuse in the United States from the over-arching perspectives of the healthcare, legal, and homeland defense and security disciplines.

⁸³ Adapted from Frank Zimring, "Is Gun Control Likely to Reduce Violent Killings?" *The University of Chicago Law Review* 35, no. 4 (1968): 721–737.

⁸⁴ Adapted from Tom W. Smith, "The Polls: Gender and Attitudes toward Violence," *The Public Opinion Quarterly* 48, no. 1 (1984): 384–396; "Guns," accessed June 15, 2014, www.gallup.com/poll/1645/Guns.aspx; see also Rebecca Riffkin, "Americans' Dissatisfaction with U.S. Gun Laws Highest since 2001," Gallup, January 30, 2014, http://gallup.com/poll/167135/americans-dissatisfaction-gun-laws-highest-2001.aspx.

• How do the homeland security, legal, and healthcare disciplines perceive, define, interpret, and approach the issues surrounding gun misuse-related injuries and deaths?

A literature review is performed that includes the collection and use of theoretical and practical insights from selected authors. The thesis first turns to healthcare discipline-related perspectives and challenges with respect to confronting issues surrounding gun misuse. In part, it is done to avoid immediately entering the homeland security and legal arenas where a greater degree of potential polarization might occur concerning the topic of gun ownership, use, and misuse.

C. GUN MISUSE PREVENTION AS A HEALTHCARE DISCIPLINARY ISSUE

According to the Department of Health and Human Services (DHHS) website:

The mission of the Department of Health and Human Services is to help provide the building blocks that Americans need to live healthy, successful lives. We fulfill that mission every day by providing millions of children, families, and seniors with access to high-quality health care, by helping people find jobs and parents find affordable child care, by keeping the food on Americans' shelves safe and infectious diseases at bay, and by pushing the boundaries of how we diagnose and treat disease.⁸⁵

Healthcare disciplinary approaches directed at gun misuse have been largely patterned after traditional response-centered approaches to other threats to the public's health. Response-centered approaches to other threats to the public's health. Response health approaches attempts to minimize resultant disabilities and deaths stemming from traumatic gunshot wounds. See Appendix B. An attempt is made to minimize the negative health consequences in the setting of gun misuse aftermaths. Established emergency department, operating room, and intensive care unit procedures and protocols are in place for gunshot wound trauma patients. A review of the literature reveals that the homeland security, legal, and healthcare disciplines appear to behave in a similar manner. That is, from the perspective of the

^{85 &}quot;HHS OCIO Mission Statement," 2005, http://www.hhs.gov/ocio/about/mission/mission.html.

⁸⁶ Kenneth F. Maxcy et al., *Maxcy-Rosenau-Last Public Health & Preventive Medicine*, 14th ed. (Stamford, CT: Appleton & Lange, 1998).

⁸⁷ Anthony S. Fauci and Eugene Braunwald, *Harrison's: Principles of Internal Medicine*, 17th ed. (Columbus, OH: McGraw-Hill Publishers, 2008): 1673–80.

severity level of actual or potential consequences posed by a given and unfolding gun misuse threat.⁸⁸

Gunshots appear not only to strike physical victims but also echo throughout the community and media sound bites.⁸⁹ Healthcare as a discipline must also contend with the mental health and social consequences that flow throughout the victim's family and community. It is also not uncommon for those with gunshot wounds to return to the healthcare system for repeated episodes of gun-related trauma.⁹⁰ To put gun misuse is now entertained.

1. Gun Misuse-related Injury and Death Rates

As a preliminary observation, current statistical research data regarding the predominant causes for gun misuse-related deaths does not seem to correlate with disciplinary perspectives, public perceptions, and the emphasis the media places upon homicide as the leading cause for gun-related deaths. A literature review is performed in an attempt to discern why the public and disciplinarian perceptions are apparently being skewed. This skew of perception leans towards an invalid recognition of homicide as being the main cause of gun-related deaths. The literature review attempts to explore and discern the basis for this phenomenon to include an exploration of what impediments to discourse, if any, exist concerning an open dialogue regarding gun misuse-related injuries and deaths.

Historically, over 400 predominantly gang-related homicides (murder rate) occur in Chicago on a yearly basis. Despite the recent explosion of media sound bites regarding homicides in Chicago, homicides have actually been on a decline over the past few decades, as noted in Table 3.

⁸⁸ Andrew B. Peitzman et al., *The Trauma Manual* (Hagerstwon, MD: Lippincott Williams & Wilkins, 2002), 3.

⁸⁹ Martin Innes, *Signal Crimes: Social Reactions to Crime, Disorder, and Control* (Oxford: Oxford University Press, 2014).

⁹⁰ R. Stephen Smith et al., "Recidivism in an Urban Trauma Center," *Arch. Surg.* 127, no. 6 (1992): 668–670.

Table 3. Chicago Police Annual Reports (Homicides)⁹¹

Year:	1928	1965	1970	1980	1990	1995	2000	2010	2011	2012	2014
HR:	498	396	810	863	851	828	633	436	435	516	432

The HR (Homicide Rate) in Chicago is noted for the indicated years from 1928 to 2014.

Despite this finding, a recent increase in the homicide rate in Chicago has been perceived as a cause for heightened concern. Data from an FBI UCR 2014 report notes a population-based rate per 100,000 people of 15.1 for homicide and an aggravated assault rate of 460.0 in Chicago. Hundreds more non-lethal shootings with resultant injuries are included in the calculation of the aggravated assault, but not homicide, rate in Chicago. Guns may also be used in criminal activities, such as forcible rape, robbery, burglaries, and automobile thefts that put the public in danger, although not resulting in a recordable homicide. In 2010, more than 105,000 gun-related injuries and deaths occurred nationally, with non-fatal injuries being more than twice the number of reported deaths. Yet, the homicide rate does not include gun-related deaths due to suicide or accidental shootings. Gun misuse does not even spare the sanctity of healthcare institutions as noted in the next section.

2. The Impact of Gun Misuse on Healthcare Resources

A literature review is performed to discern some of the direct impacts of gun misuse upon the healthcare system, and particularly, with respect to hospital settings. An attempt is made to discern what factors are involved with approaches taken by these healthcare institutions with respect to situations involving the presence of guns and the consequences of gun misuse.

⁹¹ Adapted from Chicagocop.com. for Chicago police statistical summaries and Chicago police annual reports.

⁹² Ibid.; .see also Gary LaFree, "A Summary and Review of Cross-National Comparative Studies of Homicide," *Homicide: A Sourcebook of Social Research* (1999): 125–145.

⁹³ Ibid.

⁹⁴ Jeffrey D. Morenoff, Robert J. Sampson, and Stephen W. Raudenbush, "Neighborhood Inequality, Collective Efficacy, and the Spatial Dynamics of Urban Violence," *Criminology* 39, no. 3 (2001): 517–558.

Hospital grounds, according to the literature, are apparently not even safe when it comes to gun misuse. Most states do not have laws against carrying legal, loaded guns into the hospital environment. Even if a state does have such provisions, screening for guns does not routinely occur in medical care settings. In 2012, a Johns Hopkins study by Kelen revealed that between the years 2000 and 2011, a total of 154 hospital-related shooting events occurred in 40 states, resulting in at least one person being injured per event. This statistic does not reflect the aggravated assault rate. The study notes, that of this number, 91 (59%) of shooting incidents occurred within hospital buildings. These mostly involved the emergency department setting. The other 63 (41%) of shootings occurred on hospital grounds, mainly parking lots that resulted in a total of 235 victims, included injuries and deaths. Further, on average, the incidence of hospital employees being assaulted was four times more likely than for other private sector workers, or eight per 10,000 and two per 10,000, respectively. The section of the private sector workers are given by the private sector workers, or eight per 10,000 and two per 10,000, respectively.

By law in Illinois, businesses are allowed to post a "no guns allowed" sign.⁹⁸ Regardless, it appears that the actual effectiveness and legal significance of such a sign is not known. When an armed civilian enters a hospital emergency department or hospital grounds, the rules are inconsistent for how a concealed or even visible gun situation should be approached.⁹⁹ Also, if necessary, when the gun should be reported to legal authorities, and how the gun should be secured and handled by the medical institution and staff members, appears to be ill defined. Healthcare professionals might also be incapable of distinguishing whether a patient's gun is potential criminal or terrorism-

⁹⁵ Terry S. Boone, "Violence in the Workplace and the New Right to Carry Gun Law—What Employers Need to Know," 37 S. Tex. L. Rev. 873, June 1996; see also Gregory P. Brown et al., "Threats against Clinicians: A Preliminary Descriptive Classification," *Journal of the American Academy of Psychiatry and the Law Online* 24, no. 3 (1996): 367–376.

⁹⁶ Gabor D. Kelen et al., "Hospital-based Shootings in the United States: 2000 to 2011," *Annals of Emergency Medicine* 60, no. 6 (2012): 790–798.

⁹⁷ Ibid.

⁹⁸ Nigel B. Keep and C. Paul Gliber, "How Safe Is Your Ed?" *The American Journal of Nursing* 95, no. 9 (1995): 44–50.

⁹⁹ "Will No-gun Signs Help?" July 14, 2013, http://www.highbeam.com/doc/1N1-147896C15D5097 C8.html; see also Donald W. Craig, "Guns and Yoga," *The Educational Forum* 36, no. 2 (1972): 181–187.

related evidence or just simply a personal legal possession to be secured or even disregarded.

The lack of trauma centers and access to appropriate mental healthcare services is well documented. White unavailability compounds the problem of gun misuse. The occurrence of gun-related shootings has forced the closure of trauma centers in the very areas seemingly at highest risk according to the data for gun misuse incidents. Many of these closures were in part the result of the fiscal challenges faced by these trauma institutions. Trauma center administrators were unable to compensate fiscally for the inordinate drain on resources imposed by a largely uninsured and non-paying, gunshot-related trauma patient population. White is situation could have dire fiscal consequences for hospitals choosing to maintain level I, trauma center capabilities. Nonetheless, the failure of a hospital to provide level I trauma assistance to innocent gunshot wounded victims appears to also strain the trust-based relationship with the community it serves. The thesis, through the wider gun misuse prevention lens, now turns to explore whether the data supports the emphasis placed on homicide as being the most common cause of gun-related deaths.

3. Suicide: Standing in the Shadows of Taboo and Homicide

A question exists as to why and how a commonly held misperception of homicide as being the actual cause for most gun misuse-related deaths occurs. Additionally, how is this viewpoint reinforced and "validated" by those holding this misperception? It is also unclear whether a conscious or even subconscious avoidance of dialogue concerning gunrelated deaths occurs involving accidental shootings and suicide. The answer to these

¹⁰⁰ Laurie Abraham, *Mama Might Be Better off Dead: The Failure of Health Care in Urban America* (Chicago: University of Chicago Press, 1993).

¹⁰¹ Marie Crandall et al., "Trauma Deserts: Distance from a Trauma Center, Transport Times, and Mortality from Gunshot Wounds in Chicago," *American Journal of Public Health* 103, no. 6 (June 2013): 1103–1109.

¹⁰² Patricia A. Southard and Lynn Eastes, "Financial Strategies and Outcomes Management in Trauma Care: Current Status and Predictions for the Future," *AACN Clinical Issues: Advanced Practice in Acute and Critical Care* 6, no. 2 (1995): 257–68.

¹⁰³ Ibid.

questions has potential implications for how the disciplines are currently organized and orientated on an operational, as well as tactical level.

More than 57% of the 29,500 gun-related deaths within the United States in 2004 were attributed to suicide, as opposed to all other causes including homicide. 104 For the year 2008, the National Violent Death Reporting System (NVDRS) noted, of the 15,755 violence related deaths within 16 states, approximately 58.7% were due to suicide, 26.4% were due to homicide, 14.5% were considered undetermined intent, and 0.4% were deemed unintentional. 105 Further, the report noted that the principal methods leading to suicide-related deaths were firearms (48.4%), poisonings (19.1%), and asphyxiation, i.e., hangings, strangulations, and suffocations, (14.6%). The firearms-related suicide rate for U.S. children between five to 14 years old approaches 11 times that of the next highest of the 26 industrialized countries examined. 106 This data indicates that nearly three quarters of all gun-related deaths on a yearly basis are not due to homicide. This report also notes that those with mental illness are more likely to be the victims rather than the perpetrators of gun-related homicide. In addition, of all gun-related deaths, 70.6% occurred within the home environment and not on the streets or in public spaces as often portrayed in the media. These findings appear to invalidate directly the prevailing public perception of homicide as representing the main cause for gun-related deaths, as well as the location of where these deaths occur.

The thesis now turns to the issue of behavior-based interventional approaches to modify gun ownership and use-related behaviors.

4. Behavioral Modification Approaches to Gun Misuse

Apparently, the search for the potential root causes and inappropriate behavioral traits potentially leading to gun misuse have been the basis for vast amounts of research.

¹⁰⁴ Mark Ligin, "Mental Illness, Previous Suicidality, and Access to Guns in the United States," *Psychiatric Services* 59, no. 2 (2008): 198–200.

¹⁰⁵ "National Violent Death Reporting System," last updated August 29, 2016, www.cdc.gov/Violence Prevention/NVDRS/index.html.

¹⁰⁶ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Rates of Homicide, Suicide, and Firearm-Related Death among Children—26 Industrialized Countries," 101–105.

A literature review is performed that explores what has been noted by governmental agency authorities and academicians concerning behavior-based approaches to gun misuse from a healthcare perspective.

The search for the root causes of inappropriate behaviors with respect to gun use has been the subject of vast volumes of research studies. 107 Yet, the recent rash of daily gun violence incidents might serve to underscore the need for further research and the development of approaches to protect the public. 108 Some researchers have even questioned whether an individual's identification with and progression into the criminal misuse of guns can be proactively averted. 109 This approach might be analogous to preventing an individual from progressing up Moghaddam's staircase on their way to becoming a radicalized terrorist. 110

Durkheim's social theories have been generally interpreted as supporting the validation of the protective features of social cohesion and social integration. Some sociologists have pointed out that the modern environment weakens these protective features, which leads to a greater risk with respect to individual and collective morbidity and mortality, which would presumably include self-destructive behaviors, including that of intentional suicide. Kushner challenged this view and noted, "We should be skeptical about recent studies connecting improved population health to social capital." Even so, countering Kushner's view, May completed a 15-yearlong study using a behavior-based public health interventional approach. This approach was centered upon community cohesion to address suicide prevention within an American Indian tribal nation. May

^{107 &}quot;Homicide," accessed February 12, 2014, www.hsph.harvard.edu/hicrc/firearms-research/guns, home.uchicago.edu/ludwigj/papers/Impact of Brady Act 2013.pdf.

¹⁰⁸ "Injury Prevention & Control: Division of Violence Prevention," last reviewed July 12, 2016, http://www.cdc.gov/ViolencePrevention.

¹⁰⁹ Fathali M. Moghaddam, *Multiculturalism and Intergroup Relations: Psychological Implications* for Democracy in Global Context (Washington, DC: American Psychological Association, 2008): 141–142.

¹¹⁰ Fathali M. Moghaddam, *Understanding Terrorism: Psychosocial Roots, Consequences, and Interventions* (Washington, DC: American Psychological Association, 2004).

^{111 &}quot;Suicide," accessed November 19, 2014, http://www.durkheim.uchicago.edu/Summaries/suicide. html.

¹¹² Howard I. Kushner and Claire E. Sterk, "The Limits of Social Capital: Durkheim, Suicide and Social Cohesion," *American Journal of Public Health* 95, no. 7 (2005): 1139–1143.

noted, based upon the interventional strategies utilized, a "remarkable downward trend" in suicidal acts, both in "magnitude" and "temporally." These observations appear to be important to consider as gun misuse prevention approaches are constructed that address gun misuse behaviors in general, as well as the issue of gun-related suicidal behaviors.

It is important to note that recent profiling attempts have found a lack of correlation between mental health criteria for abnormal behaviors and observed terrorism-related behaviors. ¹¹⁴ It may have implications for how those with mental illness are viewed with respect to their potential to participate in criminal and terrorism-related acts involving the use and misuse of guns.

Intoxicated states may result from the use of illicit drugs, improper prescribed medication usage, or excessive alcohol intake. The use of alcohol and firearms ownership concordance has been directly correlated via geospatial studies performed by the Harvard University School of Public Health. These studies noted that 60% of gun owners were also considered "binge drinkers," those who consume three or more alcohol containing beverages per day. To this point, an apparent resistance to the sharing of healthcare provider data with law enforcement still exists. Some healthcare providers argue that such disclosures might prevent drug and alcohol-addicted patients from seeking treatment were they to be overtly "targeted" in this way. The

At the same time, drunk-driver-related accidents, injuries, and deaths in this country have significantly decreased. That is, after the regulation and enforcement of laws and media campaigns directed against drinking and driving. This campaign also

¹¹³ Philip A. May et al., "Alcohol and Suicide Death among American Indians of New Mexico: 1980–1998," *Suicide and Life-Threatening Behavior* 32, no. 3 (2002): 240–255.

¹¹⁴ David Brannan, Philip Esler, and N. T. Anders Stindberg, "Talking to "Terrorists:" Towards an Independent Analytical Framework for the Study of Violent Sub-state Activism," *Studies in Conflict & Terrorism* 24, no. 1 (2001): 3–24.

¹¹⁵ Henry Wechsler, "Harvard School of Public Health College Alcohol Study, 1993," ICPSR Data Holdings, ICPSR06577-v3, *Inter-university Consortium for Political and Social Research*, 2005, http://doi. org/10.3886/ICPSR06577.v3; see also Ernest L. Abel, "Guns and Blood Alcohol Levels among Homicide Victims," *Drug and Alcohol Dependence* 18, no. 3 (1986): 253–57.

¹¹⁶ Lawrence Gostin, "Health Care Information and the Protection of Personal Privacy: Ethical and Legal Considerations," *Annals of Internal Medicine* 127, no. 8_Part_2 (1997): 683–690.

included the disclosure of post-accident clinical and laboratory test results, as well as medical evidentiary testimony to legal authorities. ¹¹⁷ It is interesting that while the operation of a motor vehicle when intoxicated is against the law, such strict provisions for the possession or use of a gun by intoxicated owners appears to be glaringly lacking. George Zimmerman, for instance, was alleged to be driving while intoxicated just before shooting the unarmed teenager Trayvon Martin to death. ¹¹⁸

Effective behavior-based and prevention-centric approaches might serve to avoid the need for addressing the more complex, costly, and dire consequences arising from unchecked gun-related misuses. Yet, behavior-based approaches to gun misuse would still need to pass the framework litmus tests of being cost effective, practical, and the provision of improved citizen safety and security. ¹¹⁹ It would apparently have to be accomplished while preserving gun owner autonomy and rights protections.

In a 2001 report entitled, "Youth Violence: A Report of the Surgeon General," direct statements were made about the effectiveness of prevention strategies concerning guns. 120 In Chapter V, entitled "Scientific Standards for Identifying Program Effectiveness," three categories were noted for prevention efforts, "primary prevention," "secondary prevention" and "tertiary prevention." Within each category, various approaches were evaluated using scientific criteria to determine their validity as an effective approach. These approaches were then further subdivided into one of three categories: "model," "promising," or "does not work," depending on the degree of determined effectiveness.

¹¹⁷ Donald G. Freeman, "Drunk Driving Legislation and Traffic Fatalities: New Evidence on BAC 08 Laws," *Contemporary Economic Policy* 25, no. 3 (2007): 293–308.

¹¹⁸ Francis Robles and Miami Herald, "A Look At What Happened the Night Trayvon Martin Died," *Tampa Bay Times*, 2012; see also Kelsey Marie Chatlosh, "Whiteness in a Black City: Who Gets to Fit In," *Popular Anthropology Magazine* 4, no. 2 (2014): 11–20.

¹¹⁹ William Bratton, *Fighting Crime and Disorder: Policing Experience from America* (Westminster, London, United Kingdom: Policy Exchange, 2011).

¹²⁰ National Center for Injury Prevention and Control (U.S.), National Institute of Mental Health (U.S. and Center for Mental Health Services (U.S.), *Youth Violence: A Report of the Surgeon General* (Rockville, MD: Office of the Surgeon General, 2001).

With respect to primary prevention, the study found that skill and competency building programs, such as the Life Skills Training program and the Midwestern Prevention Project, were among the most effective. Promising primary prevention programs involved parenting and family-centered programs, such as the Iowa Strengthening Families Program and the Preparing for the Drug-Free Years program. Ineffective primary prevention programs included peer-led programs, educational non-promotion programs and D.A.R.E. (Drug Abuse Resistance Education). The study notes that, "D.A.R.E. is the most widely implemented youth drug prevention program in the United States." It is also noted that "this program continues to receive persistent and substantial support from parents, teachers and police, as well as government funding." That is, "despite numerous well-designed evaluations and meta-analyses, which consistently show little or no deterrent effects on substance abuse." 121

Secondary prevention efforts, according to this report, are directed towards "children at high risk of violence." Effective approaches were listed within the categories of parent training and home visitation programs. Parent-oriented training has been associated with clear improvements in their children's aggressive and antisocial behaviors, which was reflected in lower assault and delinquency-related police contact and arrest rates. Promising secondary prevention programs were noted to include "multicontextual programs," that address home, school and community-based factors that lead to violent behaviors. Examples include the Yale Child Welfare Project, Families and Schools Together, and the Fast Track Project. Also promising are "academic programs" and moral-reasoning, problem-solving, thinking skills programs." Of interest, ineffective secondary prevention approaches included "gun buyback programs, firearm training, and mandatory gun ownership [reporting]." According to this report:

Gun buyback programs, a particularly expensive strategy, have consistently been shown to have no effect on gun violence, including firearm-related homicide and injury. This finding may appear counterintuitive, given the fact that these programs do in fact take guns off

¹²¹ National Center for Injury Prevention and Control (U.S.), National Institute of Mental Health (U.S.), and Center for Mental Health Services (U.S.), *Youth Violence: A Report of the Surgeon General*; Steven L. West and Keri K. O'Neal, "Project DARE Outcome Effectiveness Revisited," *American Journal of Public Health* 94, no. 6 (2004): 1027.

the street. However, the report notes that there is some evidence that most of the guns turned in are not functional and that most persons turning in guns have other guns at home. Efforts at redirecting youth behavior and shifting peer group norms have not only been found to be ineffective, but have actually increased delinquent peer group cohesion and facilitated deviancy training. 122

Applying these observations to existing gun misuse intervention programs might result in insights for the creation of more effective gun misuse, prevention-centric approaches. This application might also allow for the more judicious and effective use, and act to prevent the wasting, of valuable resources.

Tertiary prevention, this report noted, is directed towards, "violent and seriously delinquent youths." This study's analysis relied heavily upon the research performed by Lipsey, Wilson, and Andrews. 123 Lipsey drew two major conclusions concerning the treatment of violent and seriously delinquent youth. First, "contrary to earlier opinions, effective treatment can divert a significant proportion of delinquent and violent youths from future violence and crime." Second, "the effectiveness of different types of programs for seriously delinquent youth varies greatly." In fact, with respect to the second point, the report notes that Lipsey found that the most ineffective programs not only did not help, but also increased the rate of subsequent offenses by 18%. This result was considered an undesirable "iatrogenic," i.e., harm arising from the treatment itself, effect. This finding may further highlight the need for interdisciplinary collaboration that monitors for the potential to do harm to program participants when devising discipline specific approaches to gun misuse. It would seem to include those approaches directed at preventing terrorism, as well as criminal gun-related activities.

In the Surgeon General's report, effective tertiary programs included behavioral and skill development interventions, family clinical intervention, functional family therapy, multi-systemic therapy, multi-dimensional treatment foster care, and justice

¹²² Ibid.

¹²³ Mark Lipsey, "Juvenile Delinquency Treatment: A Meta-analytic Inquiry into the Variability of Effects," in *Meta-Analysis for Explanation: A Casebook*, ed. Thomas D. Cook et al. (New York: Russell Sage, 1992), 83; Don A. Andrews et al., "Does Correctional Treatment Work?—A Clinically Relevant and Psychologically Informed Meta-analysis," 28 *Criminology* 369 (1990): 369–404.

system services. For justice system programs, a focus on services rather than the possibility of increased punishment was critical. Ineffective tertiary programs were noted to be boot camps, residential programs, waivers to adult court, and counseling. Despite the Surgeon General's 2001 report release, many programs listed as being ineffective apparently are still being practiced currently.

Based upon the literature, it appears that the fruition of more effective interdisciplinary approaches to gun misuse and the cost savings from the discontinuation of ineffective approaches appears to be required and prudent. This recognition can also help interdisciplinary approaches avoid unintentional harm from being done to those in need of help, for example, as with the inappropriate use of peer group-based approaches. The Surgeon General's report and Lipsey's work may also point to a need for the reevaluation of existing approaches directed at preventing the progression of program participants into potential criminal, gang, or terrorist group membership and activities.

The literature review reveals that the DHS offers active shooter preparedness training courses, materials, and workshops on its website. The "active shooter training" program is provided via the federal law enforcement training centers (FLETC). Training on countering violent extremism (CVE) is also available. This training might serve as a potential starting point for the building of cross-disciplinary training and education programs concerning the proper use and handling of guns, as well as misuse avoidance. In addition, cross-disciplinary benefits may also arise.

The examination of other health care approaches not directly related to gun misuse, such as tobacco abuse, seatbelt use, obesity, and childhood poisoning seem to provide insights related to the construction of effective approaches that might be applicable to gun misuse.¹²⁵ The arduous course that these public health and safety-related

¹²⁴ Franklin Graves and Gregory Connor, "The FLETC Use of Force Model," *The Police Chief* (1992): 56–57.

^{125 &}quot;Chronic Diseases Prevention Programs—Tobacco Abuse Prevention," accessed June 8, 2013, http://www.cdc.gov; Paul Hurst, "Compulsory Seat Belt Use: Further Inferences," Accident Analysis and Prevention 11, no. 1 (1979): 27–33; "DNPAO State Program Highlights, Limiting Access to Sugar-Sweetened Beverages," September 2010, http://www.cdc.gov/obesity/downloads/limitingaccesstossbs.pdf; Alvin C. Bronstein et al., "2011 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS), 29th Annual Report," Informa Healthcare USA, Inc., 2011, http://aapcc.s3.amazonaws.com/pdfs/annual_reports/2011_NPDS_Annual_Report_-_Final.pdf.

legislative and policy battles have and continue to witness, including successes and failures, is tumultuous at best. Nonetheless, the successes they achieved would seemingly have been unobtainable without active interdisciplinary support. A review of the literature appears to provide a framework of sorts itself for envisioning the battleground within which both gun misuse prevention legislation and public acceptance must tread. The thesis now turns to discuss gun misuse prevention from a legal system disciplinary perspective.

D. GUN MISUSE AS A LEGAL SYSTEM DISCIPLINARY ISSUE

Law enforcement officers, as well as the court systems, routinely confront the issue of gun misuse-related injuries and deaths. These systems often operate within communities where poor education, inappropriate behavioral choices and gun misuse exist. Relative community stability traditionally appears to have been a local phenomenon that may vary greatly from one geographic (e.g., postal zip code area) or social environment (e.g., home, school, work) to another. With the passage of time, U.S. communities themselves apparently are becoming asymmetrical threat environments. The threats faced by these local, at-risk communities also tend to be projected upon the national media platforms that include previously un-involved "safe and secure" communities. The ideological viewpoints and realities of previously remote and isolated rural, as well as urban communities also admix upon the national media stage with potential impacts on these communities. Such social circumstances appear to serve as preludes to the development of dire consequences including poor physical and mental health outcomes.

¹²⁶ Kathy Robertson, "Museum Exhibit: ZIP Code Determines Life Expectancy," *Sacramento Business Journal*, October 19, 2012, http://www.californiamuseum.org/museum-news/museum-exhibit-zip-code-determines-life-expectancy.

¹²⁷ Nancy Krieger et al., "Zip Code Caveat: Bias Due to Spatiotemporal Mismatches between Zip Codes and U.S. Census-Defined Geographic Areas-The Public Health Disparities Geocoding Project," *American Journal of Public Health* 92, no. 7 (2002): 1100–1102.

To date, in the United States, policy decisions surrounding gun ownership and use have mainly rested within the purview of the legislative and legal system domains. 128 Often, these domains are presented in the literature as the holy-grail solution for addressing the tragic daily consequences of gun misuse that befall this nation. Yet, they appear mainly to function in a responsive fashion to address gun-related misuses from their unique disciplinary perspectives. However, it is difficult to discern exactly which of these disciplines during periods of actual practice has ownership and overall culpability for various aspects of the gun misuse response process outcomes. Even more obscure within the literary sources reviewed are the mechanisms and to what degree various public needs are ultimately being met by these disciplines with respect to instances of gun misuse.

On the local level, responders cannot always assume that the traditional social and geographic "battlefront lines" are permanent fixtures. 129 The overlapping of local, state and federal law enforcement jurisdictions is also of import. 130 Discerning the boundaries between local policing and federal enforcement appears to obscure gun misuse-related jurisdictional issues further. In addition, the ability of law enforcement operatives to adapt continuously to such a variable and complex landscape of gun misuse behaviors and cultural perspectives appears to be challenging. Within the DHS, the Transportation and Security Administration (TSA), Immigration and Customs Enforcement (ICE), and United States Coast Guard (USCG) have overlapping boarder protection responsibilities. 131 It seems logical that each agency's vision and mission statement presumably would tend to shape the approaches to the presence of a gun within its area of operation. For example, at the TSA interface of transportation protection, the presence of

¹²⁸ "Gun Politics in the United States," accessed February 13, 2014, http://www.directessays.com/essays/Gun_Politics_In_The_United_States/Crime/Gun_Politics.html.

^{129 &}quot;Gun Politics in the United States."

¹³⁰ William J. Vizzard, "FBI Influence on State and Local Police," *Encyclopedia of Criminology and Criminal Justice*, 2014, 1573–581.

¹³¹ Office of Inspector General, *Major Management Challenges Facing the Department of Homeland Security: (Excerpts from the FY 2007 DHS Annual Financial Report)* (Washington, DC: Department of Homeland Security, 2008).

a rifle would seemly have a more heightened sense of urgency than at a routine, local law enforcement checkpoint for deer hunting permits.

Yet, despite the areas of jurisdictional overlap, these agencies are all housed within the DHS and must be ultimately consistent with the overall DHS vision and mission statements. This alignment would appear to require a great deal of coordination and interagency collaboration to protect this nation's borders and waterways in an effort to prevent activities, such as illegal gun use, smuggling, and trading. For the purpose of discussion, this thesis views the homeland security enterprise as a whole from the perspective of the overall DHS vision and mission statements unless component agency differences are specifically specified.

1. Crime and Public Safety

The national daily occurrence of gun misuse-related deaths and injuries is associated with the presence of poorly regulated, widely distributed, and deeply entrenched guns. The literature review indicates that sufficient and effective approaches aimed at controlling the illegal straw, gray and black-market sale, distribution, and use of guns appear to be noticeably lacking. ¹³² It seems analogous to a public health "iceberg model." ¹³³ It occurs when a disease, such as tuberculosis, becomes active and noticeable in a small number of symptomatic members of the population. However, the causative bacteria remain present and dormant in a much larger number of individuals below the surface of expression within the general population. This subpopulation represents an ever-present threat to the entire population should the bacteria become active causing widespread disease. In this situation, the vast number of guns would serve as the agent below the surface of expression within the population with occasional instances of gun misuse "expression."

According to a statement made in a *CNN* report on March 21, 2013 by Yoko Ono, the wife of John Lennon, and a strong proponent of stricter gun control laws, "over

¹³² Christopher S. Koper and Peter Reuter, "Suppressing Illegal Gun Markets: Lessons from Drug Enforcement," *Law and Contemporary Problems* 59, no. 1 (1996): 119.

¹³³ John Travis, "Model Explains Bubonic Plague's Persistence," *Science News* 158, no. 17 (2000): 262.

1,057,000 people have been killed by guns in the USA since John Lennon was shot and killed on the 8th of December, 1980."¹³⁴ Abundant laws that attempt to balance the citizen's right to bear arms and public safety interests are already "on the books" of many jurisdictions. Nonetheless, these very same laws often vary and collectively fail to address the issues surrounding gun-related violence and misuse effectively. ¹³⁵ The possession, use, and misuse of guns also apparently have implications regarding the likelihood that a given individual will eventually be killed by a gun or incarcerated by law enforcement.

2. Addressing Gun Misuse through Incarceration

Nationally, both the incarceration and aggravated assault rates have increased at an alarming rate since the 1950.¹³⁶ Some people appear to believe that the creation of prison systems provides a potential answer for this societal problem. In fact, the State of California built one new university while building 26 new prisons in the year of 2011 based on crime projections.¹³⁷ A study notes that, although the U.S. population represents approximately 5% of the total global population, it imprisons 25% of the total number of prisoners globally. Also, the United States currently incarcerates citizens at a rate five times that of the year 1970, with more that 2.5 million prisoners presently in custody.¹³⁸

^{134 &}quot;Yoko Ono Tweets Picture of John Lennon's Glasses as a Plea against Gun Violence," March 22, 2013, http://www.cnn.com/video/data/2.0/video/bestoftv/2013/03/22/entertainment-update-with-kimserafin.cnn.html.

¹³⁵ Glenn L. Pierce, *The Characteristics and Dynamics of Crime Gun Markets Implications for Supply-side Focused Enforcement Strategies* (Washington, DC: Department of Justice, 2004).

¹³⁶ Ernest M. Drucker, A Plague of Prisons: The Epidemiology of Mass Incarceration in America (New York: New Press, 2011); Jenna M. Loyd, Matt Mitchelson, and Andrew Burridge, ed., Beyond Walls and Cages: Prisons, Borders, and Global Crisis, vol. 14 (Athens, GA: University of Georgia Press, 2013).

¹³⁷ Joshua Page, *The Toughest Beat: Politics, Punishment, and the Prison Officers' Union in California* (Oxford: Oxford University Press, 2011); see also Michaels Spencer, "California Faces Tough Choices on Overcrowded Prisons," PBS NewsHour, July 15, 2011, http://http://www.pbs.org/newshour/bb/law-july-dec11-prisons 07-15/.

¹³⁸ Leo Carroll and Claire P. Cornell, "Racial Composition, Sentencing Reforms, and Rates of Incarceration, 1970–1980," *Justice Quarterly* 2, no. 4 (1985): 473–90; see also Russell D. Javitze, *Mass Incarceration and Offender Reentry in the United States* (New York: Nova Science Publishing, 2009); Kelly Frailing and Dee Wood Harper, *Fundamentals of Criminology: New Dimensions* (Durham, NC: Carolina Academic Press, 2013).

The day-to-day operations of the law enforcement and legal systems have resulted in the emergence of a massive and expensive "prison industrial complex." ¹³⁹

The vision for the Department of Justice (DOJ) was stated in *Berger v. United States*, 295 U.S. 78, 88 (1935):

The United States Attorney is the representative not of an ordinary party to a controversy, but of a sovereignty whose obligation to govern impartially is as compelling as its obligation to govern at all; and whose interest, therefore, in a criminal prosecution is not that it shall win a case, but that justice shall be done. 140

To date, the legal system has primarily been used as a mechanism to detect, detain, and prosecute suspected offenders. Posner points to "jurisprudence," by which he means, "the most fundamental, general, and theoretical plane of analysis of the social phenomenon called law." ¹⁴¹ He further lists four theories relating to corrective, distributive, procedural, and retributive justice. By comparison, the aim of healthcare remedies is focused upon helping those afflicted with disease, the "host," through the eradication of "disease-causing agents." The medical system views all humans, even if criminal, as the ultimate host to be saved. However, in practice, the legal discipline has its parallel in combating crime while viewing the public as the "host" that must be saved and the offender as the "agent of disease" that must be contended with or eradicated. The literature review would appear to indicate that sometimes a purely "curative" approach might be deemed inappropriate by the legal and homeland security disciplines. For instance, as with the commission of capital crimes, involving defenseless children. The medical profession may be incapable of crossing this line with respect to the punishment of an individual as being viewed as an agent of disease; for instance, as with capital punishment. The thesis now turns to the intersection of gang, criminal, and terrorismrelated activities involving gun misuse.

¹³⁹ Angela Yvonne Davis and David Barsamian, *The Prison Industrial Complex* (Oakland, CA: AK Press, 1999).

¹⁴⁰ U.S. Supreme Court: Berger v. United States, 295 U.S. 78 (1935).

¹⁴¹ Richard A. Posner, *The Problems of Jurisprudence* (Cambridge, MA: Harvard University Press, 1990): xi.

3. The Gun Misuse Nexus with Gangs, Smuggling, and Terrorism

The literature reveals that the individual at the trigger and firing a gun is either vilified or glorified depending upon the context in which the gun is being used. It has been stated, "one man's terrorist is another man's freedom fighter." He that as it may, it appears that in-group beliefs and norms can work to validate even the blatant misuse of guns. Vigilante, as well as terrorist organizations and gangs, are often able to justify the misuse of guns within their memberships. Communities now appear to be open portals to gang members, potential terrorist attacks, and criminal gun trafficking and sales. These networks appear to extend through the local, national, and inter-national arenas. Unchecked and unrestricted behaviors around the use and handling of guns within urban community environments appear to lean in the direction of tragic outcomes. Those who harbor destructive or harmful intents can now seemingly wreak havoc on the general public with guns, apparently at will. The next section explores executive, legislative, and legal system approaches to gun misuse.

4. Presidential Executive Orders and Congressional Acts

A review of literature regarding presidential executive orders, congressional legislation, and existing laws concerning gun ownership and use is essential to the purpose of this thesis. Of particular importance in this regard are the federal assault weapons ban (FAWB), NFA, Cleary Act, and the Brady Bill. These executive and legislative documents are not only a collection of facts and figures. Rather, they represent the testimonies and perspectives of law enforcement officials, advocacy group

¹⁴² Gerald Seymour, Harry's Game: A Novel (New York: Random House, 1975): 62.

¹⁴³ Thomas J. Dishion, Joan McCord, and François Poulin, "When Interventions Harm: Peer Groups and Problem Behavior," *American Psychologist* 54, no. 9 (1999): 755.

¹⁴⁴ Christopher S. Koper, "Crime Gun Risk Factors: Buyer, Seller, Firearm, and Transaction Characteristics Associated with Gun Trafficking and Criminal Gun Use," *Journal of Quantitative Criminology J Quant Criminol* 30, no. 2 (2013): 285–315.

¹⁴⁵ David L. Altheide, "The Columbine Shootings and the Discourse of Fear," *American Behavioral Scientist* 52 (June 2009): 1354–70; Stephen J. Sedensky III, "Report of the State's Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on December 14, 2012," November 23, 2013, http://www.ct.gov/csao/lib/csao/Sandy_Hook_Final_Report.pdf; Pan Pantziarka, *Lone Wolf—True Stories of Spree Killers* (London: Virgin Publishing, 2002).

representatives, and government officials attempting to contend with the national issue of gun misuse. However, some of these attempts to address gun misuse appear to miss the mark.

a. Too Dangerous for Public Use: Switchblades and Brass Knuckles

A perceived problem with switchblades in this nation was highlighted in the movie "Rebel without a Cause." This position was strongly asserted in reality by citizens who were horrified by the consequences resulting from the criminal use of automatic switchblades in their communities, particularly in inner city environments. Ongress, as a result of public outcry, successfully banned automatic switchblade knife ownership as being "too dangerous" for society in most places in the United States in the 1950s. Which Switchblades have remained illegal in U.S. interstate commerce since 1958, under the Switchblade Knife Act (15 U.S.C., Sec. 1241–1245). This very Act was reaffirmed and ratified by Congress in Amendment 1447 to 15 U.S.C., Sec. 1244, and signed into law as part of the fiscal year (FY) 2010 Homeland Security Appropriations Bill on October 28, 2009. The reader is left with the following question. Is not an automatic assault rifle more dangerous than a switchblade or brass knuckles?

b. Presidential Assassination and the National Firearms Act

The National Firearms Act (NFA) of 1934 mandated the taxing and registration of all fully automatic weapons, short barrel rifles, and short barrel shotguns. ¹⁵⁰ After the tragic assassination of President Kennedy on November 22, 1963 by Lee Harvey Oswald,

¹⁴⁶ "Rebel without a Cause, 'The Top Box-Office Hits of 1956," Variety Weekly, January 2, 1957.

¹⁴⁷ From U.S. 19 CFR 12.95 (1990), Switchblade knife definition: "A 'switchblade knife' means any imported knife, or components thereof, or any class of imported knife...which has one or more of the following characteristics or identities: (3) Unassembled knife kits or knife handles without blades which, when fully assembled with added blades, springs, or other parts, are knives that open automatically by hand pressure applied to a button or device in the handle of the knife or by operation of inertia, gravity, or both."

¹⁴⁸ The Switchblade Knife Act, Pub. L. 85–623, 72 Stat. 562, enacted on August 12, 1958, and codified in 15 U.S.C. §§ 1241–1245, prohibits the manufacture, importation, distribution, transportation, and sale of switchblade knives on federal or tribal lands, or interstate commerce.

¹⁴⁹ Halbrook, "What the Framers Intended: A Linguistic Analysis of the Right to "Bear Arms," 151–162; H.R. 2892 (111th): Department of Homeland Security Appropriations Act, August 24, 2010. Also see "15 U.S. Code Sec. 1241 (P. L. 113–86)," accessed January 12, 2014, http://www.crs.gov.

¹⁵⁰ National Firearms Act (NFA), Pub. L. No. 474; approved June 26, 1934.

using a mail order rifle costing just over \$12, the Gun Control Act of 1968 prohibited the sale of guns via mail order.¹⁵¹ This Act also prohibited the sale of guns to felons, as well as the transfer of guns to minors. The Act established the requirement that guns bear a serial number and are identifiable via a tracking system that notes a given gun's make, model, and serial number.

The attempted assignation of President Reagan on March 30, 1981 by John Hinckley, Jr., resulted in a gunshot head wound to then Press Secretary James Brady. 152 This assault and battery, and attempted Presidential assassination, spawned the creation of the Brady Handgun Violence Prevention Act (Pub. Law No. 103–159, 107 Stat. 1536) that was signed by President Clinton on November 30, 1993, and went into effect on February 28, 1994. 153 The Act added a federally directed mechanism for a point of gun sale background check on potential gun purchasers. The Gun Control Act of 1968 was further updated by the domestic violence offender gun ban legislation. 154 This ban prohibited gun ownership by those convicted of misdemeanor domestic violence. These legislative Acts served as the prelude to President Clinton's federal assault weapon ban.

c. The Federal Assault Weapons Ban

President Bill Clinton signed the FAWB on September 13, 1994.¹⁵⁵ The Act amended 18 U.S.C., section 921(a) by defining the term "semi-automatic weapons." It

¹⁵¹ Andrew Herrmann, "Gun Dealer Haunted by Sale of Rifle Used to Kill JFK Oswald Used Alias, Paid Klein \$21.45 for Mail-order Weapon," *Chicago Sun-Times*, November 16, 2003, http://www.highbeam.com/doc/1P2-1505559.html?refid=easy_hf; see also Kimberly L. Freiberger, "Ruby, Jack (1911–1967)," in *Encyclopedia of Prisons & Correctional Facilities*, ed. Mary Bosworth (Thousand Oaks, CA: SAGE Publications, Inc., 2004), 861–862.

¹⁵² Mark S. Davis, *The Concise Dictionary of Crime and Justice* (Thousand Oaks, CA: Sage Publications, 2002).

^{153 &}quot;President Clinton Signs the Brady Bill," YouTube video, 5.23, from C-Span Live, posted by Brady Campaign, November 25, 2008, https://www.youtube.com/watch?v=JJ9VRrfzIKo; see also U.S. Government Accountability Office, Report to the Committee on the Judiciary, U.S. Senate, and the Committee on the Judiciary, U.S. House of Representatives, Gun Control, Implementation of the Brady Handgun Violence Prevention Act.

¹⁵⁴ Department of the Treasury, "Federal Assault Weapons Restrictions on Gun Ownership," *Federal Register* 62, no. 124 (June 27, 1997).

¹⁵⁵ Violent Crime Control and Law Enforcement Act of 1994. U.S. Department of Justice, "Violent Crime Control and Law Enforcement Act of 1994," 1994, http://www.gpo.gov/fdsys/pkg/BILLS-103hr3 355enr/pdf/BILLS-103hr3355enr.pdf.

specifically prohibited from the effective date of signing, the manufacture for civilian use of certain semi-automatic firearms (aka, "assault weapons") within the United States. Nineteen semi-automatic rifles were listed for this purpose, regardless of their associated weapon features (See Appendix E). Other potential assault-type guns were then classified as assault weapons, depending upon the presence of two or more features involving their ultra-structural design. For example, if the "magazine" may be separated from the weapon's handgrip. "Magazine" refers to a detachable component of the gun or rifle that holds bullets (aka, "rounds") for firing. Another feature considered by the FAWB is whether the stock of a weapon—the expanded rear potion of the rifle—is fixed, folding, or telescoping in type. The stock is used to stabilize a rifle during firing by pressing it back against the firer's shoulder. Other features considered for classifying a weapon as an assault rifle include the weapon's pistol grip and the presence of a bayonet mount, flash suppressor, or grenade launcher.

The FAWB had a 10-year sunset date of September 13, 2004. However, the FAWB is now non-existent, upon the demise in session of House Resolution (H.R.) 6257 introduced on June 12, 2008. This rule attempted to make the law permanent and to expand the list of guns covered. This effort was legislatively defeated, which effectively ended the assault rifle ban. Several attempts have been made to revive this Act, but all have apparently failed to reach the House to date. 157

It is estimated, by the National Shooting Sports Foundation (NSSF), a trade association for the U.S. firearms industry, that in 2010, all economic activity from firearms manufacturing, distribution, and other ancillary activities totaled \$27.8 billion (U.S. dollars). Such a financial incentive to manufacture and sell guns, as well as the strength of the NRA as a pro gun-rights lobby group, would appear to present a

¹⁵⁶ National Rifle Association Institute for Legislative Action, *Finally, the End of a Sad Era—Clinton Gun Ban Stricken from Books!* (Fairfax, VA: National Rifle Association Institute for Legislative Action, 2004).

¹⁵⁷ Jeffrey A. Roth and Christopher S. Koper, *Impacts of the 1994 Assault Weapons Ban: 1994–96, Research in Brief* (NCJ 173405) (Washington, DC: National Institute of Justice, 1999).

^{158 &}quot;Firearms and Ammunition Industry Economic Impact Report 2013," accessed June 8, 2013, http://www.nssf.org/impact/; see also National Rifle Association Institute for Legislative Action, *Finally, the End of a Sad Era—Clinton Gun Ban Stricken from Books!*.

formidable obstacle to the adoption of legislation that attempts to limit or ban the sale and use of guns. The question also exists of whether those who profit from the illegal sale of guns are acting to exert clandestine lobbying influences upon the handling of issues concerning gun ownership confronted by government.

Despite the apparently formidable obstacles to reform, when gun misuse tragedies occur, gun safety advocacy groups can still exert waves of efforts that slowly influence and transform legislation. The Virginia Tech massacre, the Penn State University sex abuse scandal, and the Eastern Michigan University concealed murder of Laura Dickinson, are examples of laws being changed due to advocacy group efforts in the wake of safety and security breaches. The Jeanne Cleary Disclosure of Campus Security Policy and Campus Crime Statistics Act, commonly known as the Cleary Act of 1990, amended the Higher Education Act of 1965. It requires that "all colleges and universities that participate in federal financial aid programs to keep and disclose information about crime on or near their respective campuses." Currently, civil penalties can be levied of up to \$35,000 per violation against institutions that violate the Cleary Act. Penalties may also include the suspension of federal financial aid programs customarily granted to the institution. The Cleary Act requires the generation of an annual security report, crime log, timely warnings, and crime statistics.

However, from a reading of the literature, it appears that such legal approaches are still reflective of a response-based approach, i.e., after the student injury or death has occurred, rather than a proactive prevention-centric posture. Perhaps, the answer lies within the realm of blended interdisciplinary approaches to policy development. That is, approaches that simultaneously support the creation of gun misuse legislation from both

¹⁵⁹ Virginia Tech Review Panel, Mass Shootings at Virginia Tech: Report of the Review Panel Presented to Governor Kaine, Commonwealth of Virginia (Virginia: Virginia Tech Review Panel, 2007); Glenn W. Muschert, "Research in School Shootings," Sociology Compass 1, no. 1 (2007): 60–80; Darby Dickerson, "Change or Be Changed: The Impact of Outside Forces on Campus Risk Management," Campus Activities Programming, no. A18, 2008.

¹⁶⁰ Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act ("Clery Act" of 1990) amended the Higher Education Act of 1965; Higher Education Act of 1965. H.R., Hearings, 89th Cong.

prevention-centric, as well as response-centric perspectives. This thesis now turns to examine collaborative attempts to address potential criminal activities by gang members.

5. Emphasis on Criminal Prevention and Intervention

At least on a superficial level, a direct overlap also appears to exist between the homeland security, legal, and healthcare disciplines with respect to both theoretical and practical considerations regarding gun misuse-related behaviors. It is noted in the DOJ guidelines that fusion centers should be established to bring public and private entities "together with a common purpose and improve the ability to safeguard our homeland and prevent criminal activity." This goal might be achieved by the creation of interdisciplinary gun misuse prevention approaches. By necessity, these approaches must include and actively engage the healthcare, homeland security, and legal service providers, as well as those at risk for gun misuse.

With respect to views on gang membership, just such an opportunity for interdisciplinary collaboration arose in the Chicago high school system. ¹⁶² A lingering problem existed with what exactly defines a person as having membership within a gang. On further review, two differing definitions of what constitutes gang membership appeared to exist, when comparing the views of law enforcement and school-based teachers and nurses. The report noted that the educational system definition for gang membership appeared to be less developed and somewhat nebulous when compared to that of the existing law enforcement definition.

The report notes that according to Chicago law enforcement officials,

A street gang is an organized group that participates in criminal, threatening or intimidating activity within the community. This anti-social group, usually of three or more individuals, evolves from within the community and has recognized leadership, as well as a code of conduct.

¹⁶¹ "ICE and DOJ Sign Agreements to Share Information on Drug Trafficking and Organized Crime," August 24, 2009, http://www.highbeam.com/doc/1G1-206259174.html; see also Jerome D. Hagen, "Interagency Collaboration Challenges Among Homeland Security Disciplines in Urban Areas" (master's thesis, Naval Postgraduate School, 2006).

¹⁶² James W. Wagner and Kate C. Kirby, *The Chicago Crime Commission Gang Book—A Detailed Review of Street Gangs in the Chicago Metropolitan Area* (Chicago: The Chicago Crime Commission, 2006).

The group remains united during peaceful times, as well as during times of conflict. A street gang is an organization that exhibits the following characteristics in varying degrees:

- A gang name and recognized symbols
- A definable hierarchy
- A geographic territory
- A regular meeting pattern
- A code of conduct
- An organized, continuous course of criminal activity.

By contrast, the high school educational system definition notes that a gang is,

Any organization or group of three or more persons having as one of its primary activities the commission of one or more criminal acts, which has an identifiable name or identifying sign or symbol, and whose members individually or collectively engage or have engaged in a pattern of criminal activity. ¹⁶³

This glaring definitional discrepancy seems to highlight a lack of adequate collaboration between the law enforcement and school officials as they independently formulated these definitions. According to the report, this discrepancy resulted in inadequate educator training about gangs. It also resulted in an inability for educators to cope with the occurrence of gang associated behaviors and activities within the context of the school environment. For educators not to possess a clearer view of the transition point between simply disruptive student behaviors and true gang membership was truly problematic. Failure to identify the boundary for gang membership led to the inadvertent misclassification by educators of some students as gang members when in fact they were not. As noted in the report, the misidentification of students as gang members when they were not might have resulted in inappropriate treatment and sanctions resulting in further student misconduct, alienation, and an increased risk of safety and security failures.

The report notes that active communication and collaboration between the educators and local police worked to redefine this terminology surrounding gang

¹⁶³ Ibid., 8.

membership. The result was the collaborative establishment of a shared vision and more realistic guidelines for addressing situations involving student unrest. This approach resulted in changed educator views and behaviors regarding the potential membership of students in gangs. Importantly, the approach tended to both preserve student rights and prevent future student gang membership misclassifications. The report notes that the overall sense of safety and security experienced by the educators and students was increased. It appears that a balance between liberty and security was also more properly established in this process. The thesis now turns to the issue of public social justice and public resiliency with respect to gun misuse.

E. GUN MISUSE PREVENTION AS A SOCIAL JUSTICE AND PUBLIC RESILIENCY ISSUE

Mistrust for the very law enforcement and judicial systems that claim to operate for the provision of safety and security also appears to exist on reviewing the literature.

1. The Intersection of Gun Misuse with Poverty, Education, and Social Equity

Underlying this mistrust are social tensions that appear to vilify and oppose law enforcement, judicial and homeland security efforts. ¹⁶⁴ Legal system operatives often must first attempt to cross the "how-why" battleground bridge of trust when attempting to assist those at risk for the consequences stemming from gun misuse. ¹⁶⁵ Judicial and law enforcement explanations of "how" things are procedurally done is often more clearly stated than "why" community members should place their trust in police officers and the legal process.

Poverty, it appears, works to limit an individual's educational opportunities and exposure to diverse viewpoints and experiences. The national dropout rate of high school students is at an all-time high. In Chicago, the high school dropout rate now approaches

¹⁶⁴ Aleksandra J. Snowden and William Alex Pridemore, "Alcohol Outlets, Social Disorganization, Land Use, and Violence in a Large College Town Direct and Moderating Effects," *Criminal Justice Review* 38, no. 1 (2013): 29–49.

¹⁶⁵ "Bay Area Officer Unions Decry Anti-Police Rhetoric," December 25, 2014, http://www.highbeam.com/doc/1G1-394976029.html?refid=easy_hf.

30%. ¹⁶⁶ This statistical fact might portend a dismal safety and security-related future not only for those dropping out of high school but American society as a whole. It seems that such circumstances may potentially leave in the void they create a potential space for missed education, including harmful or destructive viewpoints and practices. Whether a person lives in an urban or rural setting, it seems they can become rooted in the views and beliefs of a relatively small group of people. Some concern also exists that cell phone-bound youth are inappropriately being left to videogames and "on-line parenting" for their socialization and upbringings. ¹⁶⁷ Being connected to the virtual world does not eliminate a person's potential for social isolation on an interpersonal level in physical reality. It also provides fertile soil for criminal and terrorism-related ideological influences to take root.

In his book, Franz Fanon noted several observations concerning post-colonization communities in Africa. ¹⁶⁸ He describes the tensions arising from the decolonization of suppressed people, rather than the encroachment of the neoliberal, free-market system of globalization." This is shrouded within the ideology of race-based colonialism. Some of the points he makes might lead to a clearer understanding of the basis for the social dynamics in existence within communities of color in North America as well. Social inequities still exist and this divide appears to be growing, which potentially fosters circumstances resulting in gun misuse. ¹⁶⁹ However, poor and racially white rural or urban communities appear to suffer from the consequences of poverty and the lack of access to social support mechanisms in a similar fashion. Upon a review of the literature, it appears that the traditional definition of "family," as well as social support structures have

^{166 &}quot;High School Dropout Rates in Midwest Displayed in New Geographic Data Map Series that Offers Insight for Policymakers the Midwest Education Atlas Includes Maps for Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin," November 4, 2010, http://www.highbeam.com/doc/1G1-241311929.html?refid=easy_hf.

¹⁶⁷ Ken Fuchsman, "The Family Romance Transformed: American Domestic Arrangements Since 1960," *Clio's Psyche: Understanding the "Why" of Culture, Current Events, History, and Society* 17, no. 4 (March 2011).

¹⁶⁸ Frantz Fanon, *The Wretched of the Earth*, trans., Richard Wilcox with commentary by Jean-Paul Sartre and Homi K. Bhabha (Paris, France: Presence Africaine, 1963), updated by New York: Grove Press, 2004, xv.

¹⁶⁹ Chester W. Hartman, *America's Growing Inequality: The Impact of Poverty and Race* (Lanham, MD: Lexington Books, 2014).

dramatically changed in recent decades that includes the traditional social roles for men and women in society.¹⁷⁰ Immigration and multiculturalism provide additional factors to contend with in an already complex social environment.

Peoples' zip codes can be used to predict their relative risk for pain, suffering, and a premature death due to gun misuse.¹⁷¹ Those living in these impoverished communities have very little in the way of social capital or clout to leverage in an attempt to block illegal gun sales and criminal or terrorist-related activities involving the use of guns. As discussed in the next section, the social complexities that arise may even serve to make the distinction between the perpetrator and the victim increasingly more difficult to define.

2. The Dilemma of Defining the "Perpetrator" and the "Victim"

A literature search is performed in an attempt to provide clarity and to discern the implications of labeling an individual as either a "victim" or a "perpetrator." The homeland security and legal disciplines attempt to create clear distinctions between the roles of the perpetrator and the victim. Such a distinction itself may serve as a further impediment to discourse. As a result, a clearer understanding of the role the terms "perpetrator" and "victim" play in the actual unfolding of responses to gun misuse is required.

In general, the perpetrator of an intended crime is viewed as unlawful and the victim as the one who bears the negative consequences of the perpetrator's actions. Such a view appears to be supported, for instance, with an overt criminal act in which a defenseless member of the public is shot and killed by a bank robber. Nevertheless, it appears that the distinction between the perpetrator and the victim might become obscured during the application of both policy and enforcement actions. For example, the burglar that sues the homeowner after slipping down broken stairway steps or after

¹⁷⁰ Natalie Angier, "The Changing American Family," *The New York Times*, November 26, 2013, http://www.nytimes.com/2013/11/26/health/families.html?_r=0; Fuchsman, "The Family Romance Transformed: American Domestic Arrangements Since 1960."

¹⁷¹ JAMA, "Gun Violence," *JAMA* 286, no. 5 (2001): 605; see also Adil Abdalla et al., "Spatial Analysis of Injury-Related Deaths in Dallas County Using a Geographic Information System," Baylor University Medical Center Proceedings, July 1, 2012.

falling "victim" to a homeowner created booby trap. From the gun misuse prevention standpoint, such a distinction between perpetrator and victim can become even less discernable. Recent "stand-your-ground" laws have also empowered gun owners in instances of questionable gun-related killings. Even more obscure are healthcare perceptions of those who present for gunshot wound-related treatment but are involved in criminal activities. It appears that in some instances of gun misuse, the perpetrator and victim can even be embodied within the same individual, as with crimes of passion or acts of intentional suicide.

In the next section, the question of whether a paradigm shift in terminology from "gun control" to "gun misuse prevention" is needed. Further, would any additional benefit be provided for the interdisciplinary collaborative process when addressing the issues surrounding gun misuse?

• Would a paradigm shift in terminology from gun control to gun misuse prevention lead to a better understanding of the factors that tend to shape inappropriate, as well as appropriate disciplinary approaches to gun misuse?

Current legislative approaches are mainly directed at the issue of "gun control" with respect to intentional homicides. A literature review reveals that often these legislative mandates take the form of situation-dependent politically motivated band aides, disjointed laws, and policies or inconsistently applied sanctions. ¹⁷³ For example, within Illinois, abundant laws are on the books of many jurisdictions. Nevertheless, these laws often fail to address the actual issues surrounding gun misuse effectively. ¹⁷⁴ Further, Illinois' legislative approach for addressing gun-related homicides was to enact legislation allowing for the carrying of concealed weapons by Illinois residents. ¹⁷⁵ A ban

¹⁷² Elizabeth Berenguer Megale, "A Call for Change: A Contextual-Configurative Analysis of Florida's 'Stand Your Ground' Laws," *SSRN Electronic Journal* (2014); Albert E. McCormick Jr., "The Enforcement of Florida's" Stand Your Ground" Law: Preliminary Findings," *The Journal of Public and Professional Sociology* 6, no. 1. (2014): 1–25.

¹⁷³ Julie Pace and Alicia A. Caldwell, "Gun Laws Show Difficulty of Stemming Violent Acts," PsycEXTRA, 2012,

¹⁷⁴ Paul Tetrault, "Major Misfire: Misconceptions Drive Gun Liability Bills in Seven States and on Federal Level," *American Agent & Broker*, May 1, 2013.

¹⁷⁵ Mark Guarino, "Gun Control: Illinois Law Requiring Background Checks among 'Most Stringent," *The Christian Science Monitor*, August 19, 2013.

on the sale of handguns in Chicago was also held as "un-constitutional." ¹⁷⁶ In effect, these laws provided potentially untrained members of the public with the equivalent of a policing action-like right to use deadly force with a gun at their own discretion. This scenario seems to demand at a minimum, careful scrutiny. Law enforcement agencies stress the need for the continuous and effective training of its officers with respect to gun use. Yet, such a requirement does not currently seem to apply to often untrained but armed community members.

F. THE UTILITY OF A PARADIGM SHIFT IN GUN MISUSE TERMINOLOGY

To explore the utility of a paradigm shift in gun misuse terminology, the thesis examines the literature further.

1. Gun Misuse Terminology: A Shift from the Complex to the Complicated

At first glance, the issue of "gun control" appears to exist in the realms of the chaotic (Cynefin), "global problematique" (Ozbekhan) or "wicked problem" (Churchman), see Appendix F. This thesis presents a lens through which a wider view of discipline-based approaches to gun misuse is sought. This process involves a refocusing from a more polarized "gun control" centric to a broader "gun misuse prevention" perspective. To accomplish this refocusing, an initial methodological step involves taking a figurative step back to gain a wider view of inappropriate gun use. This step appears to have allowed for the reframing of the gun misuse problem within the context of this thesis. This shift in terminology was greatly enhanced by the use of Cynefin theoretical considerations to allow issues surrounding gun misuse that initially appeared to be complex or even "chaotic" to be more clearly defined and envisioned. Misperceptions, impediments to discourse, and polarized viewpoints were disentangled and moved from the complex to the complicated region of Cynefin model where they could be more effectively explored and addressed.

^{176 &}quot;Court Rejects Handgun Sales as Public Nuisance—City of Chicago v. Beretta U.S.A. Corp., No. 95243 (Ill. 11/18/2004)," 2004, http://biotech.law.lsu.edu/cases/nuisance/BERETTA.htm.

2. Exploring the Utility of a Change in Gun Misuse Terminology

A movement from the complex to the complicated region of the Cynefin model provides a platform to address gun misuse issues with a greater degree clarity and depth of analysis, which also appears to pave the way for the exploration and development of best interdisciplinary practice approaches to support the common goal of gun misuse prevention. The next section addresses the roles that information sharing and collaboration might play in such an endeavor.

• Would the creation of an interdisciplinary perspective and the sharing of disciplinary information provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse?

G. EXPLORING THE POTENTIAL FOR INTERDISCIPLINARY COLLABORATION

The literature review reveals that homeland security, legal, and healthcare disciplines are all focused upon the issue of gun misuse from their unique perspective. At the crossroads of these various approaches to gun misuse are potential opportunities for collaboration. Based upon a review of the literature, it appears that each of these disciplines has lessons and data that could potentially provide cross-disciplinary benefit. The literature search and analysis process serves to discern whether the paradigm shift from "gun control" to "gun misuse prevention" leading to a reframing of the gun misuse issue confronted by these disciplines is a valid approach. That is, whether the paradigm shift aids the process of clarifying not only the social issues surrounding gun misuse but also the substance and structuring of the approaches taken by the homeland security, legal, and healthcare disciplines. The foundation is thus laid for discerning whether existing disciplinary approaches to gun misuse are correctly established. It also sets the stage for discerning to what degree interdisciplinary collaboration should be earnestly striven for, is actually achievable or even desirable and involves the reporting, collection, and sharing of information between the disciplines. The thesis now turns to examine governmental precedents and existing laws and policies that impact the various disciplines with respect to the issue of gun control.

1. Presidential Directives Regarding Collaboration and Data Sharing

President Woodrow Wilson once noted, "So far as administrative functions are concerned, all governments have a strong structural likeness; more than that, if they are to be uniformly useful and efficient, they must have a strong structural likeness." ¹⁷⁷

This statement would seemingly also apply to administrative approaches to gun misuse as envisioned within the various governmental agencies as well. Despite the obvious ties of gun misuse to the homeland security, healthcare, and legal disciplines, a uniform framework to address gun misuse is still lacking.

A CDC and Prevention surveillance report recommendation recently concluded:

A state-based, national reporting system is needed to track the incidence, detailed circumstances, characteristics of the shooter and injured person, and long-term consequences of fatal and nonfatal firearm-related injuries. These data would potentially be useful for the design, implementation, and evaluation of prevention programs aimed at reducing the burden of firearm-related injuries in the United States.¹⁷⁸

This recommendation directly supports the need for establishing an interdisciplinary approach to gun misuse prevention that relies on a sharing of the data, knowledge, and best practice approaches between the homeland security, legal, and healthcare disciplines. However, an apparent gap exists on exactly how and to what extent this form of collaboration should occur.

The National Strategy for Homeland Security has "three primary objectives: to prevent terrorist attacks within the United States, to reduce America's vulnerability to terrorism, and to minimize the damage and recover from attacks which do occur."¹⁷⁹ To accomplish these goals after the 9/11 terrorist attacks, an initial step was the creation of

¹⁷⁷ John Milton Cooper, *Reconsidering Woodrow Wilson: Progressivism, Internationalism, War, and Peace* (Washington, DC: Woodrow Wilson Center Press, 2008): 33–34.

¹⁷⁸ Catherine Barber et al., "A "Call to Arms" for a National Reporting System on Firearm Injuries," *American Journal of Public Health* 90, no. 8 (2000): 1191.

^{179 &}quot;HHS Mission Statement."

the DHS.¹⁸⁰ The stated vision for the DHS is "to ensure a homeland that is safe, secure and resilient against terrorism and other hazards."¹⁸¹ The DHS notes the achievement of this vision is reliant upon three key concepts that form the foundation of the U.S. national homeland security strategy—security, resilience, and customs and exchange. This stated DHS vision is directly related to the Quadrennial Homeland Security Review (QHSR).¹⁸² It is noted by the DHS that public and private entities involved in owning and running the critical infrastructure and key resource (CIKR) sectors also have an active and necessary role to play in meeting this stated mission. This approach requires their involvement in the five core DHS mission areas:

- Prevent terrorism and enhancing security,
- Secure and manage our borders,
- Enforce and administer our immigration laws,
- Safeguard and secure cyberspace, and
- Ensure resilience to disasters.

The DHS website notes, "In addition, we must specifically focus on maturing and strengthening the homeland security enterprise itself." Within the Department of State (DOS), the Office of the Coordinator for Reconstruction and Stabilization (OCRS), bases its "unity of effort" on four principles: "a common understanding of the situation, a common vision or goals for the reconstruction and stabilization mission, coordination of efforts to ensure continued coherency, and common measures of progress and ability to

¹⁸⁰ David Jackson, "U.S. Senate Vote Clears Way for Creation of New Homeland Security Department," *Knight Ridder/Tribune Business News*, November 20, 2002, http://www.highbeam.com/doc/1G1-94942713.html.

^{181 &}quot;Our Mission," accessed April 5, 2014, https://www.dhs.gov/our-mission.

¹⁸² Catherine Dale, *National Security Strategy: Legislative Mandates, Execution to Date, and Considerations for Congress* (CRS Order Code RL34505) (Washington, DC: Congressional Research Service, 2008); Jackson, "U.S. Senate Vote Clears Way for Creation of New Homeland Security Department; Ari Schuler, "Billions for Biodefense: Federal Agency Biodefense Funding, FY2001–FY2005," *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 2, no. 2 (2004): 86–96.

¹⁸³ David Goure, "The First Quadrennial Homeland Security Review: Neither New nor Interesting," February 12, 2010, *States News Service*, http://www.highbeam.com/doc/1G1-218851745.html.

change course if necessary."¹⁸⁴ However, the OCRS notes that the "unity of effort" provision is not intended to conflict security sector reform (SSR) programs with one another. This perspective might represent a move to quell potential tensions and conflicts preemptively that could serve to derail the operation of these programs, and thereby, provide an improved gateway for interagency collaboration. This approach appears to provide a viable framework for structuring interdisciplinary gun misuse prevention efforts.

An underlying operational assumption made by the DHS during responses to emergencies is that when local resources become exhausted, the National Response Framework (NRF) directs the use of state and then federal resources. The Federal Emergency Management Agency (FEMA), a component agency within the DHS, coordinates the activities of the National Incident Management System (NIMS) using the Incident Command System (ICS) standardized principles. It serves as part of the comprehensive emergency management by objectives approach. It involves a unity of effort through a unified command to meet the operational priorities during emergency responses of increasing size and complexity. These principles and approaches are often used by law enforcement and homeland security to address occurrences of criminal and terrorism-related gun misuse. 187

¹⁸⁴ "Department of Homeland Security Strategic Plan, Fiscal Years 2012–2016"; see also Office of Inspector General, *DHS' Counterintelligence Activities (Summary)*.

¹⁸⁵ Department of Homeland Security, *National Response Framework*.

¹⁸⁶ Federal Emergency Management Agency, About FEMA (Washington, DC: Department of Homeland Security, 2004); Federal Emergency Management Agency, National Incident Management System (Washington, DC: Department of Homeland Security, 2004); Federal Emergency Management Agency, Incident Command System (Washington, DC: Department of Homeland Security, 2004); see also Office for Domestic Preparedness, National Incident Management System (NIMS) Information and the Products and Services of the NIMS Integration Center (NIC) (Washington, DC: Department of Homeland Security, 2004); Federal Emergency Management Agency, Introduction to the Incident Command System (ICS 100) Student Manual (Washington, DC: Department of Homeland Security, 2010); Federal Emergency Management Agency, ICS for Single Resource and Initial Action Incidents (ICS 200) Student Manual (Washington, DC: Department of Homeland Security, 2010).

¹⁸⁷ Ibid.

On January 16, 2013, President Obama issued 23 executive orders calling upon federal agencies to improve their knowledge about firearm-related violence. This issuance was in response to on-going national gun-related tragedies that culminated at that time in the Sandy Hook Elementary School shooting. The President specifically wanted the public health system to address the causes and potential means for the prevention and minimization of the public health burden resulting from gun violence. The President also directed the CDC to resume its support of research directed at firearms-related violence. In addition, the Presidential executive orders resulted in congressional policies that called for required background checks for all gun sales, a ban on armorpiercing bullets, the limiting of magazines to 10 rounds and a stronger ban on "assault weapons." The executive order additionally called for the funding of schools for the development of emergency response plans. These executive orders also included the need to fund and improve U.S. mental health coverage for potential offenders and victims.

The Executive Office of the President (EOP) called for the creation of school incentives for the hiring of school resource officers and the provision of additional law enforcement tools to prevent and prosecute gun-related crimes. Highlighted was the need to improve data used for the background check system for gun sales, which placed gun control efforts on a priority list for this nation's CDC in Atlanta, GA. The CDC and the CDC Foundation asked the Institute of Medicine (IOM) and the National Research Council (NRC) to form a working group to explore the issue of gun misuse in greater detail. The committee noted its charge included the following categories: characteristics of gun violence, interventions and strategies, gun safety technology, video games and other media, and risk and protective factors.

¹⁸⁸ "2013 Barack Obama Executive Orders," 2013, http://www.federalregister.gov/executive-orders/barack-obama/2013.

¹⁸⁹ Altheide, "The Columbine Shootings and the Discourse of Fear," 1354–70; Sedensky III, "Report of the State's Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on December 14, 2012."

¹⁹⁰ "Welcome," accessed June 4, 2014. http://www.nationalacademies.org/nrc/; "About," accessed June 4, 2014, http://www.iom.edu; Bridget Kuehn, "IOM Details Ambitious Agenda for Gun Research," *JAMA* 310, no. 1 (2013); see also Mo Ibrahim, "Back to the Future: The IOM Report Reconsidered," *American Journal of Public Health* 81, no. 7 (1991): 835–837.

¹⁹¹ Ibid.

However, the committee also specifically noted in this report that it would not focus on "the areas of public health surveillance [,]... behavior/mental health...[or] clinical practice and treatment." Despite not focusing on these critically important areas, the committee astutely identifies the gun and assailant, the victim and the situational circumstances as representing the agent, host, and environment, respectively. That is, framing gun misuse within a public health infectious diseases disciplinary context. The Executive Order leading to this collaboration may lay the foundation and aid in the development of gun misuse prevention approaches that are scientifically based. The thesis now turns to potential opportunities for interdisciplinary information sharing and collaboration.

2. Approaches to the Collection and Sharing of Disciplinary Information

The homeland security, legal and healthcare disciplines have daily and overlapping responsibilities with respect to encountered gun misuse threats. ¹⁹³ Despite the functional differences between these disciplines, a common categorical approach appears to be taken in response to encountered threats. Each disciplinary approach focuses upon the detection, characterization and magnitude assessment of specific encountered threats, (see Appendix B). The various disciplinary approaches also tend to arise from a reactive rather than a proactive posture with respect to an encountered scalable and unfolding threat consistent with ICS and NIMS terminology. For example, convictions for specific criminal and terrorist-related offenses in the justice system are correlated with, and are directly proportional to, proper prosecution and sentencing guidelines based upon the seriousness of the criminal act. ¹⁹⁴ In a similar fashion, the

¹⁹² Ibid.

¹⁹³ Cameron Crandall et al., "Assessment of a Cross-Disciplinary Domestic Violence Training for Emergency Medicine Residents and Law Students," *Academic Emergency Medicine* 15 (2008).

¹⁹⁴ Colin Loftin, Milton Heumann, and David Mcdowall, "Mandatory Sentencing and Firearms Violence: Evaluating an Alternative to Gun Control," *Law & Society Review* 17, no. 2 (1983): 287; Colin Loftin and David D. Mcdowall, ""One with a Gun Gets You Two": Mandatory Sentencing and Firearms Violence in Detroit," *The ANNALS of the American Academy of Political and Social Science* 455, no. 1 (1981): 150–67.

occurrence of an illness will lead to a diagnosis-related prognosis and clinically validated and established treatment plan based upon the severity of the illness encountered. 195

These disciplines appear to have similar underlying threat-related approach patterns with respect to the specific and scaled responses they provide. This structural similarity is also apparent in the various disciplinary approaches to gun misuse. The use of Cynefin modeling and a paradigm shift in terminology from "gun control" to "gun misuse prevention" may also provide assistance in this regard. In each case, a specific threat is identified (through probing or sensing), further defined (through sensing or analysis), and responded to by the use of a specific, time-dependent and scaled solution (emergent or good practice). ¹⁹⁶ By utilizing the NIMS and ICS approaches, the DHS highlighted the need for interdisciplinary integration with respect to internal and external partners. Despite this view, the NIMS and ICS guidelines appear to have been organized in a way that still overly compartmentalizes the various disciplinary partners involved into distinct, and ultimately disconnected, essential support function (ESF) categories. ¹⁹⁷ Although such compartmentalization may act to assuage potential interdisciplinary incompatibilities or areas of potential conflict, it may also serve to prevent effective collaboration on a deeper structural and functional level.

An array of emergent and good practice guidelines for contending with gun misuse threats already exists within the homeland security, legal, and healthcare disciplines. ¹⁹⁸ It appears that the gun misuse practice approaches and lessons learned within each discipline might have cross-disciplinary applicability. The next section examines the roles of intelligence and fusion centers with respect to gun misuse.

¹⁹⁵ American Medical Association, *Principles of Clinical Practice Guidelines* (Chicago: American Medical Association, 1997).

¹⁹⁶ Elford, Wendy, A Multi-Ontology View of Ergonomics: Applying the Cynefin Framework to Improve Theory and Practice. 2012 Supplement, Vol. 41, 812–817; see also, Agnes Martinko, Occupational and Professional Licensure Requirements (Harrisburg: PA: Pennsylvania Department of Education, 1973).

¹⁹⁷ Sven C. Erichsen, *National Guard Weapons of Mass Destruction Civil Support Teams: Performing as Required?* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 2002).

¹⁹⁸ "Gun Safety," last updated February 10, 2015, http://www.nlm.nih.gov/medlineplus/gun safety.html.

3. Gun Misuse: Fusion Centers and the National Counter Terrorism Center

A data sharing and integrative approach among the disciplines to address criminal and terrorist activities was called for within the fusion center guidelines.¹⁹⁹ These guidelines were produced by a partnership between the DHS and the DOJ as part of the Global Justice Information Sharing Initiative (GJISI).²⁰⁰ In this document, the question was asked:

How can law enforcement, public safety and private entities embrace a collaborative process to improve intelligence sharing and, ultimately, increase the ability to detect, prevent, and solve crimes while safeguarding our homeland? 201

Further, the document noted that,

The ultimate goal is to provide a mechanism through which government, law enforcement, public safety, and the private sector...improve the ability to safeguard [the] homeland and prevent criminal activity...By embracing this concept, these entities will be able to effectively and efficiently safeguard our homeland and maximize anticrime efforts.²⁰²

The fusion center guidelines seem to indicate that the formation of public and private partnerships involving the collaborative and integrated usage of information technology (IT) derived data is required to answer this question. The fusion center guidelines also appear to suggest a perceived need for the existence of a collaborative process that bridges the involved disciplinary approaches, which is especially true when the bridges are already created by existing rules. As Zegart noted in reference to the research conducted by Kaplan:

^{199 &}quot;Fusion Center Guidelines: Developing and Sharing Information and Intelligence in a New Era. Health Security: Public Health and Medical Integration for Fusion Centers—An Appendix to the Baseline Capabilities for State and Major Urban Area Fusion Centers," July 2011, http://www.doj.gov/fusion.centers.

^{200 &}quot;Global Justice Information Sharing Initiative," 2005, https://it.ojp.gov/gist/62/Global-Justice-Information-Sharing-Initiative--Exploring-Service-Oriented-Architecture-Services-for-Justice-Information-Sharing.

²⁰¹ Ibid.

²⁰² Ibid.

Most U.S. intelligence agencies have no experience conducting all-source analysis, so the personnel they assign to NCTC [National Counter Terrorism Center], are learning on the job. As one senior government official put it, "Eleven organizations sent people to NCTC. Only two of them sent people who knew what they were doing... Officials still resist sharing information with colleagues assigned from other agencies even when the rules allow it." ²⁰³

To realize potential gains, the gun misuse prevention approaches selected must be envisioned and constructed properly to include the provision of the requisite resources and the selection of the right cross-disciplinary team members. Theories, rationales, and guidelines provided by Eisenhart, Allison, Ostrom, Bratton, Joblokov, Velegol, and Matson may provide assistance in the design of the requisite organizational and operational frameworks. See Appendix F.²⁰⁴

4. Gun Misuse Information Sharing: The Health Insurance Portability and Accountability Act, and the National Crime Information Center

The National Instant Criminal Background Check System (NICS) was established under the Brady Bill and serves to block felons, those convicted of domestic violence, and the mentally ill from obtaining guns.²⁰⁵ However, state compliance with this

²⁰³ Amy B. Zegart, *Spying Blind: The CIA*, the FBI, and the Origins of 9/11 (Princeton, NJ: Princeton University Press, 2007): 186.

²⁰⁴ Margaret Eisenhart and Jan Nespor, "Learning as Movement in Networks of Knowledge and Power," *Educational Researcher* 24, no. 7 (1995): 35; Margaret A. Eisenhart and Hilda Borko, *Designing Classroom Research: Themes, Issues, and Struggles* (Boston: Allyn and Bacon, 1993); Graham T. Allison, *Conceptual Models and the Cuban Missile Crisis: National Policy, Organization Process, and Bureaucratic Politics* (Santa Monica, CA: RAND, 1968); Elinor Ostrom and Marco Janssen, "Empirically Based, Agent-based Models," *Ecology and Society* 11, no. 2 (2005): 37; see also Elinor Ostrom, Clark Gibson, and Margaret McKean, *People and Forests: Communities, Institutions, and Governance* (Cambridge, MA: MIT Press, 2000); Elinor Ostrom, Roy Gardner, and James Walker, *Rules, Games, and Common-Pool Resources* (Ann Arbor, MI: University of Michigan Press, 1994); William J. Bratton and Zachary Tumin, *Collaborate or Perish!: Reaching across Boundaries in a Networked World* (New York: Crown Business, 2012); "Kathryn W. Jablokow," accessed February 18, 2014, http://www.coursera.org/instructor/ dvelegol; Jack V. Matson, "Failure 101: Rewarding Failure in the Classroom to Stimulate Creative Behavior," *The Journal of Creative Behavior* 25, no. 1 (1991): 82–85, doi:10.1002/j.2162-6057.1991.tb01 357.x.

²⁰⁵ Criminal Justice Information Services Division, *National Instant Criminal Background Check System* (Bridgeport, WV: Department. of Justice, Federal Bureau of Investigation, 1998); see also U.S. General Accounting Office, *Report to Congressional Requesters, Gun Control: Options for Improving the National Instant Criminal Background Check System* (GAO/GGD-00-56) (Washington, DC: U.S. Government Accountability Office, 2000).

directive is lacking. The Department of Health and Human Services (HHS) website notes that a 2012 Government Accountability Office (GAO) report concerning the use of the NICS revealed, "17 states had submitted fewer than 10 records of individuals prohibited [from owning guns] for mental health reasons." In response to this finding, on April 19, 2013, HHS Secretary Sebelius initiated a rule-making process to "remove unnecessary legal [Health Insurance Portability and Accountability Act (HIPAA)] barriers" that blocked the reporting by states of gun violence related information to the NICS. This removal allowed the healthcare discipline to share vitally important information with legal authorities for assuring public safety and security. At the same time, the HHS Office of Civil Rights (OCR) Director, Leon Rodriguez, also issued a statement:

In order to protect our children and communities, we must ensure that information on potentially dangerous individuals who are prohibited from possessing firearms is available to the background check system, ... At the same time, it is important to note that the vast majority of Americans with mental health conditions are not violent and that those with mental illness are in fact more likely to be victims than perpetrators. We do not want to discourage individuals who need help from seeking mental health services, and our actions will be carefully tailored to ensure patient confidentiality, as well as public health and safety. 208

The OCR presented its concerns about the potential for the emergence of inappropriate stereotyping and negative views concerning mental illness. At the same time, the OCR appears to have established a balance between citizen privacy protections and the inappropriate sale of guns to those with mental illness. This approach tended to foster greater interdisciplinary collaboration, as well as a leaning towards greater public safety and security. It appears that a careful balance between liberty and security was struck in this instance.

²⁰⁶ U.S. Government Accountability Office, Report to Congressional Requesters, Gun Control and Terrorism: FBI Could Better Manage Firearm-related Background Checks Involving Terrorist Watch List Records (GAO-05-127) (Washington, DC: U.S. Government Accountability Office, 2005); Lisa Stolzenberg and Stewart J. D'alessio, "Gun Availability and Violent Crime: New Evidence from the National Incident-Based Reporting System," Social Forces 78, no. 4 (2000): 1461.

²⁰⁷ "Obama Administration Moves to Remove Barriers to Firearm Background Check Reporting," April 19, 2013, http://www.hhs.gov/news/press/2013pres/04/20130419a.html.

²⁰⁸ Ibid.

These high level executive decisions also avoided dealing with costly legislative, legal, and bureaucratic roadblocks in establishing the requisite basis for interdisciplinary collaboration. In essence, it streamlined the ability to share information and set the stage for the creation of practical interdisciplinary approaches to address gun misuse. In addition, this view is consistent with and supported by the paradigm shift in terminology from "gun control" to "gun misuse prevention" called for by this thesis. At the same time, Dahl's and Shipler's warning about the good intentions of government potentially going astray should continue to be heeded. It appears to intimate that some form of litmus test that checks the balance between individual rights protections and the concerns for public safety and security is still required.

Historically, healthcare lobbying attempts to address gun misuse have involved mostly the same approach; that is, formal challenges to legislative and legal policy decisions concerning gun control efforts in the aftermath of gun-related tragedies.²⁰⁹ However, in more recent decades, this focus has increasingly shifted to direct victim harm assertions, social equity considerations, and healthcare cost concerns arising in gun misuse-related aftermaths.²¹⁰ Such a shift in focus towards legislative remedies regarding the use of potentially harmful products is not new to the healthcare industry. For example, a progressive behavior-based adoption of car seat safety belt usage also involved incremental advocacy group efforts directed at changing seatbelt use-related policy through legislation over time. See Appendix E.²¹¹ In the next section of this thesis technological approaches to address gun misuse prevention are explored.

This thesis now turns to the literature to discern if potential public and private partnerships exist or can be formed to address gun misuse from the perspective of technology-based prevention measures.

 $^{^{209}}$ Bryan G. Walpole, "Gun Control-a Public Health Issue," $\it Emergency \, Medicine \, 8, \, no. \, 4 \, (2009): \, 203-04.$

²¹⁰ Michael Hanslmaier and Dirk Baier, "The Effects of Harm to and Sympathy for the Victim on Punitive Attitudes: Evidence from a Factorial Survey," *Psychology, Crime & Law* 21, no. 9 (2015): 890–900

²¹¹ M. J. Allen, M. R. Barnes, and G. G. Bodiwala, "The Effect of Seat Belt Legislation on Injuries Sustained by Car Occupants," *Injury* 16, no. 7 (1985): 471–76.

• Can public and private partnerships and the use of technology provide assistance in addressing the occurrence of gun misuse-related injuries and deaths?

H. GUN MISUSE: PUBLIC AND PRIVATE PARTNERSHIPS AND THE USE OF TECHNOLOGY

A geospatial-mapping pattern concerning where gun misuse physically occurs underlies the order of the material presented in this thesis, which is done for several reasons. First, with respect to gun misuse prevention, the complexity and types of technological equipment required and utilized would appear to vary according to the size of the operational area. Next, the operational complexity, training requirements, and amount of requisite organizational resources also would presumably increase with an increasing area of coverage. As the size and location of the geographic considered changes, these technological approaches are likely to encounter varying legislative and legal constraints with which they must contend. Finally, the gun misuse issues encountered may both quantitatively and qualitatively vary with respect to the size and location of the geographic area involved. For example, does the technological approach address legal gun-use zones, such as within the home, hunting or sports environment, or illegal gun sales networks?

By necessity, a historical interdependence exists between the public and private sectors with respect to technological advancements. Brenner noted:

The technology our military relies on is mostly developed in the private sector, and most of the research it's based on is carried out in universities and private companies...The know-how of our engineering firms, the drugs that our pharmaceutical companies spend billions to develop, the trade secrets of our aerospace industry—these are the bases of our national welfare.²¹²

Might technology-based approaches be used to quell the occurrence of gun misuse-related intentional suicides, accidental shootings, and homicides? The thesis now turns to some potential technological solutions in support of gun misuse prevention. The

²¹² Joel Brenner, America the Vulnerable—Inside the New Threat Matrix of Digital Espionage, Crime, and Warfare (New York: The Penguin Press, 2011): 24; see also Joel Brenner, Glass Houses: Privacy, Secrecy, and Cyber Insecurity in a Transparent World (New York: Penguin Books, 2013).

suggested need for the creation of gun misuse prevention technological approaches appears to echo the DHS Strategic Plan (2008) objective for, "using an all-hazards approach, capitalizing on emerging technologies and working as an integrated response team." This thesis raises the question as to whether overt and covert technological approaches can be developed for effectively assuring the goal of gun misuse prevention. Specifically, can gun use-related technologies, such as on-line gun use education, radio frequency identification device (RFID) tagging, geospatial tracking devices (GTD), and facial recognition systems be used to address issues surrounding legal, as well as illegal gun possession and misuse? Such efforts will require the addressing of IT infrastructure development, as well as constitution-based gun privacy and usage rights and policies.

The homeland security, legal, and healthcare disciplines are not just "bricks-and-mortar" or even "virtual" entities. Rather, the disciplines are comprised of the cultures and professionals that reside within. These cultures and professionals affect how disciplinary approaches are ultimately materialized, enacted and perceived. However, for gun misuse prevention strategies to be implemented, it would appear to require buy-in from the very groups that terms, such as "gun control," would tend to alienate. It involves the inclusion of often opposing individual viewpoints, as well as public-private partnership perspectives.

An apparent need exists to anticipate, monitor, detect, identify, and provide timely data and information relevant to gun misuse prevention.²¹⁴ Appropriate metrics and feedback loops concerning the effectiveness of the approaches directed at gun misuse will be required as well.²¹⁵ As such an approach is developed, the tacit and explicit knowledge spiral noted by Nonaka may generate new knowledge to guide the creation of

²¹³ Department of Homeland Security, "Strategic Plan, Fiscal Years 2012–2016."

²¹⁴ Department of Homeland Security, *Privacy Impact Assessment for the Office of Operations Coordination and Planning, Publicly Available Social Media Monitoring and Situational Awareness Initiative Update* (Washington, DC: Department of Homeland Security, 2011).

²¹⁵ Hristu-Varsakelis, "Dimitris, Feedback Control Systems As Users of a Shared Network: Communication Sequences that Guarantee Stability," in *Decision and Control, Proceedings of the 40th IEEE Conference*, vol. 4 (Washington, DC: IEEE, 2001), 3631–3636.

new gun misuse prevention approaches.²¹⁶ This view is also consistent with GJISI guideline recommendations that such a system should be structured for the provision of operational guidance, practical tools, situation-based actionable information, and an assessment of its overall effectiveness.²¹⁷

This thesis presents several potential technological approaches directed at assuring gun misuse prevention. These approaches start with the consideration of the main causes of gun misuse-related deaths, suicide, and accidental shootings, within the home environment where most gun deaths occur. The approach used within this thesis then moves from the home environment outward in concentric circles to increasingly larger geographical areas. This step-wise geospatial mapping pattern is used to sequentially present gun misuse prevention approaches for several reasons. First, the complexity and types of technological equipment required and utilized would appear to vary according to the size of the area within which they must operate. Next, the complexity, training requirements, and amount of requisite organizational resources also increase with an increasing area of coverage. Also, the use of these technological approaches is likely to encounter differing and increasingly complex legislative and legal constraints they must contend with depending upon the size and type of the geographic area within which they are operating. Finally, the number and quality of the gun misuse issues encountered may vary greatly with respect to the size and demographics of the geographic area involved.

A preliminary word of caution appears to be appropriate at this time. It would appear that the literature supports the idea that careful handling is required for any generated human intelligence (HUMINT), as the circumstances surrounding gun misuse prevention efforts are unveiled and viewed through the lenses of varying disciplinary

²¹⁶ Ikujiro Nonaka, Ryoko Toyama, and Noboru Konno, "SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation," *Long Range Planning* 33, no. 1 (2000): 5–34; Georg Von Krogh, Kazuo Ichijo, and Ikujiro Nonaka, *Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation* (Oxford: Oxford University Press, 2000); Ikujiro Nonaka, "A Dynamic Theory of Organizational Knowledge Creation," *Organization Science* 5, no. 1 (February 1994): 14–37.

²¹⁷ Office of Justice Programs, Global Justice Information Sharing Initiative, *The National Criminal Intelligence Sharing Plan* (Washington, DC: Department of Justice, 2003).

perspectives.²¹⁸ Such efforts may be especially challenging in the current IT climate that is decentralized and rapidly transforming yet highly porous.²¹⁹ The reading of the literature reveals that innate asymmetrical threats related to cyber security abound and must also be satisfactorily addressed.²²⁰ In this regard, technology-based approaches appear to require a transition from approaches to gun misuse prevention based solely upon a Lancaster concept model—that addresses traditional symmetric conflict only—to one that also incorporates modern asymmetrical threat contingencies.²²¹

It appears that currently, the use of IT regarding gun misuse remains mainly focused upon reactionary inter-operative communications, resource distributions, and attempts to shorten emergency response times. 222 Arguably, the ability to reduce overall response times appears to offer a key advantage when contemplating or actively engaging in emergency response activities. However, the use of these technologies purely for response activities seems a bit myopic, especially when it comes to their potential use for proactive, prevention-centric approaches to gun misuse. Such approaches may act to "engineer-out" the root causative factors or circumstances leading to gun misuse. The American Society for Industrial Security, International (ASIS) has clearly stated the need for addressing the prevention of safety and security breaches, as well as criminal activities within workplace settings. 223 The dire consequences and costs of not having an

²¹⁸ Mark M. Lowenthal, *U.S. Intelligence Current Issues* (Washington, DC: Library of Congress, Congressional Research Service, 1983); see also Joy Paul Guilford, *The Nature of Human Intelligence* (New York: McGraw Hill, 1967); Robert J. Sternberg, *The Triarchic Mind: A New Theory of Human Intelligence* (New York: Penguin Books, 1989).

²¹⁹ Geoff Walsham, "Decentralization of IS in Developing Countries: Power to the People?" *J Inf Technol Journal of Information Technology* 8, no. 2 (1993): 74–81.

²²⁰ Martti Lehto, "The Cyberspace Threats and Cyber Security Objectives in the Cyber Security Strategies," *International Journal of Cyber Warfare and Terrorism* 3, no. 3 (2013): 1–18.

²²¹ D. Scott Bennett and Allan C. Stam, "Predicting the Length of the 2003 U.S.–Iraq War," *Foreign Policy Analysis* 2, no. 2 (2006): 101–116.

²²² Ibid.

²²³ ASIS International, *General Security Risk Assessment: An ASIS International Guideline* (Alexandria, VA: ASIS International, 2003); "Making the Jump from Public to Private," *Security Technology Executive*, June 1, 2011, http://www.asisonline.org; "ASIS Online," accessed February 13, 2014, http://www.asisonline.org/.

orchestrated and collaborative approach to preventing the unfolding of encountered threats are also clearly stated in the 9/11 Commission Report.²²⁴

These gun safety and security technologies are introduced in the form of practical disruptive technological approaches to ensure gun use safety and security. Once introduced, the aim is to have gun misuse prevention technologies, such as smart guns, RFID, GTD, and facial recognition systems establish roots by becoming attached to newly, as well as previously manufactured and entrenched guns. He would be similar to the way in which seatbelts became standard accessories in cars as parallel entrenchment items. The hope is that technology-based safety and security devices become more accepted, rather than exiting the marketplace. That is, instead becoming retained safety and security fixtures that parallel the deeply entrenched societal presence of guns. The diffusion of these technologies will ultimately be driven by incremental consumer adoption and demand. That is, rather than just the reliance upon the more arduous attempts at making lasting and effective policy changes based upon legislative or judicial interdiction. The development of these safety and security products might also result in the creation of market place jobs, as well as greater gun manufacturer and dealer sales profits.

1. Online Gun Misuse Education

The development of an on-line interdisciplinary approach to educate gun owners and the general public on gun misuse prevention appears to be needed. Historically, brick-and-mortar educational settings have served as the crucibles for not only education but also political debates and discussions that often crystallize into group semblances and

²²⁴ National Commission on Terrorist Attacks upon the United States, *The 9/11 Commission Report:* Final Report of the National Commission on Terrorist Attacks upon the United States, 1st ed. (New York: W. W. Norton & Company, Inc., 2004).

²²⁵ Chang Chieh Hang and Elizabeth W. Garnsey, "Opportunities and Resources for Disruptive Technological Innovation," *SSRN Electronic Journal* (2011).

²²⁶ Gaia Rubera, David A. Griffith, and Goksel Yalcinkaya, "Technological and Design Innovation Effects in Regional New Product Rollouts: A European Illustration," *Journal of Product Innovation Management J Prod Innov Manag* 29, no. 6 (2012): 1047–060.

²²⁷ Joseph P. Martino, "Innovation Diffusion Models of New Product Acceptance," *Technological Forecasting and Social Change* 32, no. 2 (1987): 225–26.

collective action.²²⁸ Despite this, within the current societal environment, the public has greater access through the internet to more information about guns than ever before. Only upon entering the internet portal it is possible to begin to realize the vast quantities and types of local, regional, and global gun-related information and ideological viewpoints available within this domain.²²⁹ The internet information presented about guns may not conform to, or even be congruent with, this nation's current moral, ethical, and legal imperatives.

Sufficient mechanisms to identify potentially dangerous ideological viewpoints concerning the use of guns appear to be lacking in the media. Further, dangerous ideological views concerning guns seem to filter through the very constitutional meshwork meant to protect the public by passing through the pores of individual rights protections, such as the freedom of speech.²³⁰ That is, unless an incident occurs that blatantly and overwhelmingly violates human rights laws and cultural perspectives. Nevertheless, such occurrences often prompt only poorly structured and fleeting discussions and occasionally temporizing corrective measures.

Inadequate attention is paid to what sort of social identities or intergroup relationships emerge within this complex slurry of ill-defined internet information flows concerning gun use. It appears that social identities, roles, and responsibilities surrounding the public use of guns are ill defined.²³¹ As with intelligence based upon a faulty analysis and misrepresentations, misinformation concerning gun handling and usage may erroneously be passed on as "valid" facts within the domain of propaganda or even counterintelligence.²³² This misconception might lead to the development of memes

²²⁸ Pamela Oliver, "Collective Action (Collective Behavior)," *The Wiley-Blackwell Encyclopedia of Social and Political Movements*, 2013.

²²⁹ Alex Wright, *Cataloging the World: Paul Otlet and the Birth of the Information Age* (Oxford: Oxford University Press, 2014).

²³⁰ Kent Greenawalt, *Fighting Words: Individuals, Communities, and Liberties of Speech* (Princeton, NJ: Princeton University Press, 1995); see also Alexander Tsesis, *Destructive Messages: How Hate Speech Paves the Way for Harmful Social Movements* (New York: New York University Press, 2002).

²³¹ Andy Mckinlay and Anne Dunnett, "How Gun-Owners Accomplish Being Deadly Average," in *Identities in Talk*, ed. Charles Antaki and Sue Widdicombe (London: SAGE, 1998), 34–51.

²³² Edward L. Bernays and Mark Crispin Miller, *Propaganda* (Brooklyn, NY: Ig Pub., 1928).

harmful to vulnerable internet users, and ultimately, the general public. Despite the danger of gun misuse, little appears to be said about how these public identities, roles, and responsibilities should be shaped in relation to gun use in a systematic way, which seems to call for the creation of educational counter-narratives regarding the perils of gun misuse.

According to the CDC, teen crime statistics show a decrease in the overall gunrelated homicide rates since the late 1990s. However, the overall background level of violent acts committed by teens, based on the aggravated assault rate, remains the same.²³³ The literature review reveals that an apparent gap exists that needs to be filled to proactively prevent or minimize the harmful consequences arising from gun misuse-related behaviors and social choices, that includes the inappropriate sale, distribution, handling, and use of guns. For an educational approach to be effective, it must be associated with a realized and demonstrable benefit.²³⁴ This effort must involve the recognition of the diverse social, ideological, and identity constructs surrounding gun ownership and use.

The DOJ's Bureau of Justice Assistance awarded \$1 million to the nonprofit National Crime Prevention Council (NCPC) in support of the development of a national public education campaign (NPEC) directed at educating gun owners on responsible gun ownership and safe storage practices.²³⁵ Attorney General Eric Holder noted:

As part of President Obama's comprehensive plan to reduce gun violence, the Administration is committed to working with firearm owners and enthusiasts to prevent tragic accidents and keep guns from falling into the wrong hands...We are determined to implement the kinds of common-

²³³ Brian Wiersema, Collin Loftin, and David Mcdowall, "A Comparison of Supplementary Homicide Reports and National Vital Statistics System Homicide Estimates for U.S. Counties," *Homicide Studies* 4, no. 4 (2000): 317–40; see also Centers for Disease Control and Prevention. Rates of Homicide, Suicide, and Firearm-related Death among Children—26 Industrialized Countries," *JAMA: The Journal of the American Medical Association* 277, no. 9 (1997): 704–05.

²³⁴ Melinda Beeuwkes Buntin et al., "The Benefits of Health Information Technology: A Review of the Recent Literature Shows Predominantly Positive Results," *Health Affairs* 30, no. 3 (2011): 464–471.

²³⁵ "Department of Justice Awards \$1 Million to the National Crime Prevention Council to Support Gun Safety Campaign," March 7, 2013, https://www.justice.gov/opa/pr/department-justice-awards-1-million-national-crime-prevention-council-support-gun-safety; see also "Department of Justice Announces Nearly \$240 Million in Grants to Enhance Crime Prevention Efforts across the Country," *Biotech Week*, October 15, 2008, http://www.highbeam.com/doc/1G1-187148777.html?refid=easy_hf.

sense solutions that our citizens—and especially our young people—deserve. ²³⁶

The literature suggests that this DOJ campaign created public service announcements (PSA) that aired on television, radio stations, and cable networks in the summer of 2013.²³⁷ Nevertheless, a lack of interagency collaboration regarding these educational efforts still appears to exist.

Guns currently can be acquired without the need for any proof of gun use and handling education and training. The literature discloses that these individuals may also be grossly unprepared to deal with the complexities of gun misuse-related scenarios should they arise. An educational requirement to address this gap is not currently mandated by most states.²³⁸ Identifying the root causes for harmful behavioral choices when it comes to gun mishandling and misuse has been the basis for vast volumes of research studies. Strindberg, Brannan, and Moghaddam all note important aspects of the relationship between an individual's psychosocial composition, group membership, and the tendency towards violent or terrorist-related behaviors.²³⁹ An educational component appears to be present in the recruitment and weapons training of criminals and terrorists alike. Gun misuse counter-narratives appear to be lacking in the literature. This gap appears to highlight a missing opportunity to improve the comprehension and adoption of appropriate gun-related safety and security practices.²⁴⁰ A need appears to exist to ensure

²³⁶ "Attorney General Eric Holder Speaks at the White House Gun Safety Event," April 9, 2013, https://www.justice.gov/opa/speech/attorney-general-eric-holder-speaks-white-house-gun-safety-event.

²³⁷ "New PSA Campaign," accessed February 3, 2014, http://www.ncpc.org/about/news/new-psa-campaign-encourages-firearms-owners-to-201clock-it-up201d-when-not-in-use-and-provides-firearms-safety-resources-for-families/; see also "Implement an Aggressive Public Outreach Campaign on Effective Strategies to Combat Juvenile Violence," accessed March 5, 2014, http://www.ojjdp.gov/action/sec8.htm.

²³⁸ Katherine A. Vittes and Susan B. Sorenson, "Recreational Gun Use by California Adolescents," *Health Education & Behavior* 32, no. 6 (2005): 751–66.

²³⁹ Ibid.; N. T. Anders Strindberg, "Challenging the "Received View: De-demonizing Hamas," *Studies in Conflict & Terrorism* 25, no. 4 (2002): 263–73; Brannan, Esler, and Stindberg, "Talking to "Terrorists:" Towards an Independent Analytical Framework for the Study of Violent Sub-state Activism"; Moghaddam, *Multiculturalism and Intergroup Relations: Psychological Implications for Democracy in Global Context*.

²⁴⁰ Raymond G. Miltenberger, Brian J. Gatheridge, Melisa Satterlund, Kristin R. Egemo-Helm, Brigitte M. Johnson, Candice Jostad, Pamela Kelso, and Christopher A. Flessner, "Teaching Safety Skills to Children to Prevent Gun Play: An Evaluation of in Situ Training," *J Appl Behav Anal Journal of Applied Behavior Analysis* 38, no. 3 (2005): 395–98.

individual resilience and survivability by preventing the progression into poor behavioral practices, which includes the avoidance of becoming a victim when it comes to gun handling, use, and misuse.

An interdisciplinary approach also brings a wealth of varied views, skills, and experiences to the table. For instance, public health metrics and epidemiologic analysis may provide for the overall validation of the educational approach's efficacy and operational performance of the educational process.²⁴¹ The CDC website contains a series of health impact assessment (HIA) tools that might be used for the purpose of assessing gun misuse prevention educational approaches.²⁴² The Surgeon General's report also provides guidance on the best practices that appear to work for violence prevention efforts that may be a useful starting point for this purpose as well.²⁴³ The Department of Education (DOE) has a wealth of information on the educational process.²⁴⁴ This information includes learning theories (e.g., Bloom's Taxonomy), rubrics, curriculum standards, and other educational tools. Upon a reading of the literature, it appears that these tools may aid in both the structuring and development of the gun misuse prevention educational approaches directed at gun owners and potential victims of gun violence. It appears to be vitally important to monitor and understand how gun misuse behavior unfolds in real-time. The use of law enforcement tacit and explicit knowledge spirals to generate new knowledge may strengthen the overall experience by making the education provided more relevant and reality-based.²⁴⁵ To accomplish this task, an appropriately vetted interdisciplinary post-incident, gun misuse debriefing

²⁴¹ David Blumenthal, Elizabeth Malphrus, and J. Michael McGinnis, *Vital Signs: Core Metrics for Health and Health Care Progress* (Washington, DC: National Academies Press, 2015); see also Robert H. Friis and Thomas A. Sellers, *Epidemiology for Public Health Practice* (Sudbury, MA: Jones and Bartlett Publishers, 2009).

²⁴² "Health Impact Assessment," accessed April 6, 2015, http://ephtracking.cdc.gov/showHealth ImpactAssessment.action.

²⁴³ National Center for Injury Prevention and Control (U.S.), National Institute of Mental Health (U.S.), and Center for Mental Health Services (U.S.), *Youth Violence: A Report of the Surgeon General*.

²⁴⁴ Suzanne M. Wilson, Robert E. Floden, and Joan Ferrini-Mundy, *Teacher Preparation Research:* Current Knowledge, Gaps, and Recommendations: A Research Report Prepared for the U.S. Department of Education and the Office for Educational Research and Improvement (Seattle, WA: Center for the Study of Teaching and Policy, 2001).

²⁴⁵ Judith Manning, Veronica Broughton, and Edwina A. Mcconnell, "Reality Based Scenarios Facilitate Knowledge Network Development," *Contemporary Nurse* 4, no. 1 (1995): 16–21.

questionnaire may be helpful. A post-incident checklist for the gun user, as well as victims, might also be beneficial.

The literature notes that benefits exist regarding the public reporting to authorities of suspicious activity related to gun use. Public trust in the educational process must be established and preserved. Without the establishment of trust, a public resistance and backlash to such an educational requirement may arise. Resistance might potentially arise from legal gun owners, as well as criminals, gang members, and terrorists. The implementation of the gun misuse prevention educational approach must be accomplished without engendering the dissolution of trust amongst the program participants. Whether legitimate or not, the recent National Security Agency (NSA) monitoring of public phone calling patterns does raise the specter of public distrust for government. ²⁴⁶ As a result, participant rights must be protected and appropriate sanctions for rights infringements strictly enforced. For example, participants could be provided with a de-identified code number for educational purposes to maintain their anonymity and privacy.

Ripley notes, "Survivors offer our greatest hope for reconstructing disasters—not just the plot but also the smells, the sounds, and the spontaneous acts of kindness. Their memories of the banal and the horrifying are portals into the unknown." ²⁴⁷

Survivors of gun misuse ordeals may shed light on appropriate behaviors and the overcoming of potential obstacles during gun misuse incidents. As noted earlier in the thesis, the paradigm shift from the term gun control to gun misuse prevention allows for movement from the complex to the complicated quadrant of the Cynefin model.²⁴⁸ This shift will facilitate the development of gun misuse prevention approaches. The tacit knowledge and aid of those who have personally navigated and survived gun misuse

²⁴⁶ Glenn Greenwald, Ewen MacAskill, and Spencer Ackerman, "NSA Collecting Phone Records of Millions of Verizon Customers Daily," *The Guardian* 6, no. 5 (2013): 13.

²⁴⁷ Amanda Ripley, *The Unthinkable: Who Survives When Disaster Strikes—and Why* (New York: Crown Publishers, 2008), 225.

²⁴⁸ Marion Lepmets et al., "A Cynefin Based Approach to Process Model Tailoring and Goal Alignment," 2014 9th International Conference on the Quality of Information and Communications Technology, 2014.

ordeals may aid this process and it may be of benefit in the development and improvement of gun misuse prevention educational approaches. Analogous to "herd immunity," where vaccinating 80% of the herd protects the other 20%, the sharing of these personal experiences involving gun misuse may potentially offer an additional layer of protection by preventing the development and spread of poor gun-related behaviors.²⁴⁹ The development of a counter-narrative meme directed at preventing individuals from assimilating behaviors that result in gun misuse might also be possible.²⁵⁰

As Brannan and Strindberg note, a given individual's propensity for participation in violence and anti-social group membership appear to be linked in part to the concepts of securitized and subjective identity, as well as in-group and out-group considerations. ²⁵¹ It might have implications for individuals unable to face adversity or establish and securitize their personal or community-based social identity roles. It might even take the form of seeking gang or terrorist organization membership involving gun misuse. However, those at risk for gun misuse may selectively choose a more positive identity construct to emulate if appropriately presented to them. For example, over the past decade, Chicago-based high school military academies have created a role-model environment based upon military disciplinary standards. As a result, military academy high school graduation rates of 95% to 100% have been achieved compared to the 30% dropout rates and underperforming Chicago high schools in general. ²⁵²

Educational requirements are mandatory to be granted a gun license in Canada or a driver's license in the United States.²⁵³ A similar mandatory gun licensure educational requirement for the United States might be an option for consideration. The need for the education requirement might be particularly true after an occurrence of gun misuse,

²⁴⁹ Encyclopedia of Public Health, s.v. "Herd Immunity," 2008, 674.

²⁵⁰ Michael Bamberg, "Considering Counter Narratives," in *Considering Counter-Narratives Narrating, Resisting, Making Sense*, ed. Michael Bamberg and Molly Andrews (Amsterdam, Philadelphia: John Benjamins Publishing Company, 2004), 351–71.

²⁵¹ David Brannan and Anders Strindberg, *A Practitioner's Way Forward: Terrorism Analysis* (Salinas, CA: Agile Press, 2014).

²⁵² Sophia Tareen, "Chicago Leads in Public Military Schools," *AP Online*, November 2, 2007, http://www.highbeam.com/doc/1A1-D8SLMS4G1.html?refid=easy_hf.

²⁵³ Martinko, Occupational and Professional Licensure Requirements.

which would be similar to a driver's re-education attempt after a driving infraction. As with a driver's education manual, a gun owner's educational booklet could be developed and required reading prior to testing for those seeking gun licensure. A pre- and post-educational participant evaluation process could be introduced to determine programmatic effectiveness. It appears that the Secretary of State's Department of Motor Vehicles might provide a ready-made setting for such an educational intervention for gun licensure and may provide guidance on program formulation and execution. As a portion of the collected gun handling and use testing and licensure revenues might be used in support of further gun misuse prevention efforts. This educational approach aimed at ensuring gun misuse prevention might also be provided as a general education requirement at the elementary, high school, and collegiate levels. Hopefully, it would serve to increase awareness of the dangers inherent in the misuse of guns and act to reduce the overall safety and security risk of students. The literature review now moves to consider if guns can be technologically crafted and manufactured to be safer and more secure.

2. Smart Guns: Intrinsic, Technology-based Gun Modifications

Smart gun technologies were reviewed in an IOM and NRC report entitled, "Priorities for Research to Reduce the Threat of Firearm-Related Violence." ²⁵⁵

This report notes that, the term 'smart gun' is used as "an overarching concept" to cover "all guns that have some level of user authorization... [and that] ...approximately 1,000 patents on record for various designs to prevent access to a fire arm by unauthorized users [exist], but many are untested. The patents address a range of unauthorized user prevention devices and methods, such as electronically activated holsters, firearm holster locks with fingerprint identification, audio-controlled gun-locking mechanisms, biometrically activated locks and enablement systems, voice-activated weapon-lock apparatuses, RFID and various other designs...

²⁵⁴ A. Fulwood-Wood, F. Hamilton, S. Brockington, and L. George, "P5.048 Reaching Women Through the Integration of HIV Testing into Public Service Sites: Experiences from the Department of Motor Vehicles and Income Maintenance Center in Washington, DC," *Sexually Transmitted Infections* 89, no. Suppl 1 (2013).

²⁵⁵ Ibrahim, "Back to the Future: The IOM Report Reconsidered," 835–837.

Barriers to development of these and other user-authorized technologies include lack of funding and standards... 256

The report's Commission also alluded to a 1999 IOM report, which voiced concerns that the use of safety devices might "offset the safety gains ... by reducing [an individual's likelihood of using] precautions or [by their] taking greater risks."²⁵⁷ This report also notes, "Injury prevention science has compared the strengths and limitations of various active strategies to control injuries and has found that passive strategies have a greater effect than attempts to change individual behavior," in referring to a seminal 2002 study by Teret and Culross.²⁵⁸

The categories of technological approaches presented in this report included: mechanical mechanisms, external locking devices, key or combination lock, RFID, magnetic encoding, biometric systems, location awareness, and target recognition. The report continues to note that several technological limitations currently exist, which includes the inability of technological devices to identify the gun owner accurately and reliably (e.g., through fingerprint identification) and the issue of rechargeable power sources for the devices. This thesis literature review process identified an apparent gap in the use of RFID and GTD technologies to address gun misuse. For example, that the placement of a randomly embedded RFID device or "chip" that can be read for identification purposes, might overcome the problem of serial numbers being filed off of guns by criminals and terrorists. This topic is discussed in greater detail in the next section. Upon a review of the literature, it appears that the use of GTD to fill a void in the tracking and locating of guns that are lost, stolen, or used for illegal purposes might be beneficial for homeland security and law enforcement operatives.

²⁵⁶ Ibrahim, "Back to the Future: The IOM Report Reconsidered," 835–837.

 $^{^{257}}$ Ibid; see also Bridget Kuehn, "IOM Details Ambitious Agenda for Gun Research," *JAMA* 310, no. 1 (2013).

²⁵⁸ Ibid., Stephen P. Teret and Patti L. Culross, "Product-oriented Approaches to Reducing Youth Gun Violence," *The Future of Children* 12, no. 2 (2002): 119–131.

3. The Private Use of Home or Workplace Radio Frequency Identification Device and Geospatial Tracking Device-enabled Guns

The literature appears to indicate a great need to prevent the misuse of guns not only in criminal or terrorism-related instances, but also in instances of gun mishandling, potential suicides, and accidental shootings. Welbourne investigated potential uses for RFID technology within the IT domain, focusing on "the bridging and integration of our everyday lives in the physical world with that of the virtual world via the internet of Things (IoT)."²⁵⁹ In relationship to this paper by Welbourne, and for the purpose of this thesis, the physical gun itself would serve as Welbourne's "uniquely identifiable object" that is "accompanied by a rich, globally accessible virtual object, that contains both current and historical information on that object's physical properties, origin, ownership, and sensory context."²⁶⁰ Welbourne notes, "when ubiquitous and available in real time, this information can dramatically streamline how we manufacture, distribute, manage and recycle our goods."²⁶¹ Welbourne then went on to pose the following questions.

- "How do we transform low-level RFID data into meaningful, high-level information?
- Can we design and build applications that are truly useful and not just novelties?
- If so, will their utility outweigh the potential loss of privacy?
- How can we help users understand and control their privacy settings?" ²⁶²

A direct correlation appears to exist with the question posed within this thesis concerning public-private partnerships and the need for technological solutions to address gun misuse. The position taken within this thesis is supported by Welbourne's conceptual framework. The proposed environment in which these RFID gun tags would exist corresponds with Welbourne's "RFID ecosystem." Such an approach might act to

²⁵⁹ Welbourne et al., "Building the Internet of Things Using RFID: The RFID Ecosystem Experience," IEEE Internet Computing 13, no. 03 (May/June 2009): 48–55.

²⁶⁰ Ibid.

²⁶¹ Ibid.

²⁶² Ibid.

transform low-level RFID gun-tag data into useful, high-level information. This information could include information about the gun type, characteristics, manufacturer, dealer, and purchaser. If enough guns were to be RFID or GTD tagged, the vast number of guns present in society would appear to satisfy Welborne's requirements for sufficient tag densities and rates. Similar to other entrenched and potentially harmful products, from automobiles to matches, guns are unlikely to be extricated from society within the foreseeable future, which also appears to cross the hurdles of complexity and relative advantage noted by Welbourne. The addition of an RFID or GTD to a gun might also serve to bring the issues surrounding gun misuse from a more complex towards a less complicated and more recognizable alignment that can be more effectively handled. Analysis and the emergence of good practices then become more possible with respect to gun misuse consistent with Cynefin modeling theory. ²⁶³

This thesis now turns to the topic of the monitoring of established legal gun use and gun-free zones.

4. Establishing Legal Gun Use and Gun-free Zones to Prevent Gun Misuse

The literature describes the use of passive gun detection systems at airports, schools, government institutions, and some mall entryways. However, a gap appears to exist concerning the use of such technologies in home and workplace environments. This gap, revealed through the literature review process, appears to call for these zones to be viewed as locations needing to be part of gun misuse safety and security efforts. It appears that in addition to preventing potential criminal and terrorist activities, a need exists to monitor for intentional suicides and accidental shootings arising from gun misuse as well. The traditional fixed systems are designed to detect the metallic components within guns as they pass through a detection scanner checkpoint. The

²⁶³ David J. Snowden, "The Social Ecology of Knowledge Management, Cynefin: A Sense of Time and Space," in *Knowledge Horizons: The Present and the Promise of Knowledge Management*, ed. Charles Despres and Daniele Chauvel (Oxford: Butterworth Heinemann, 2000), 237–265; see also Rory V. O'Connor and Marion Lepmets, "Exploring the Use of the Cynefin Framework to Inform Software Development Approach Decisions," Proceedings of the 2015 International Conference on Software and System Process - ICSSP 2015, 2015; Sue Childs and Julie Mcleod, "Tackling the Wicked Problem of ERM: Using the Cynefin Framework as a Lens," *Records Management Journal* 23, no. 3 (2013): 191–227.

literature review process detected what appears to be a gap in the use of existing technology in this regard. A potential advantage might be that if an RFID-tagged or GTD-enabled gun were to enter or approach the gun-free zone perimeter, law enforcement and homeland security officials would become aware of the gun's presence. A "passive" technology-based detection system is used where minimal end-user adaptability and input is required, from an ease of use standpoint, to be operational.²⁶⁴ From the literature reviewed, it would also seem to be applicable to the use of RFID and GTD systems as well. An early warning system of this type might provide benefits by serving as a trigger for actions to be taken by those alerted. Once alerted, early steps can be taken to discern whether an error by a lawful gun owner entering the gun-free zone occurred or whether a need exists to neutralize a potential criminal or terrorist threat. Interceding early in potential gun misuse situations might avoid the often tragic and costly consequences of gun misuse. The GTD is not an RFID, but rather a component capable of being geospatially tracked.²⁶⁵ This form of fixed perimeter deterrence might work to not only increase the physical safety and security of the gun-free zone occupants but might act to ensure a sense of greater liberty and domestic tranquility as well.

Despite this possibility, an apparent gray zone still exists that causes concern for legitimate gun owners about technology-based governmental privacy intrusions and individual rights infringements. The advent of drone use, cyber-security concerns, and actions by individuals, such as Snowden, do not make these issues any easier with which to contend.²⁶⁶ Based upon the literature reviewed, this point is extremely important to consider when approaching a policy that requires manufacturers to incorporate into, or

²⁶⁴ Tanya Mcgill and Chris Klisc, "End-User Perceptions of the Benefits and Risks of End-User Web Development," *End-User Computing Concepts, Methodologies, Tools, and Applications*, 2008, 1.

²⁶⁵ A. U. Alahakone and Veera Ragavan, "Geospatial Information System for Tracking and Navigation of Mobile Objects," 2009 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, 2009.

²⁶⁶ Peter Finn, "Domestic Use of Aerial Drones by Law Enforcement Likely to Prompt Privacy Debate," *The Washington Post*, January 23, 2011; U.S. Government Printing Office, *Cyber Security: Recovery and Reconstitution of Critical Networks: Hearing before the Federal Financial Management, Government Information, and International Security Subcommittee of the Committee on Homeland Security and Governmental Affairs, United States Senate, 109th Cong., 2 (2006)* (Washington, DC: U.S. G.P.O., 2007); Susan Landau, "Making Sense from Snowden: What's Significant in the NSA Surveillance Revelations," *IEEE Security & Privacy* 11, no. 4 (2013): 54–63.

private citizens to retrofit, guns with an RFID or GTD. Yet, if effective gun safety and security technologies remained under the gun owner's control, these measures would tend to protect gun owner rights and obviate the need for further governmental intrusion.

The privacy concerns will need to be addressed by determining who should be privy to the information generated by these zoned gun detection and tracking approaches. Within the body of Welbourne's research, he provides guidance on privacy concerns through the establishment of access-control interface rules. Welborne notes:

Through the utilization of RFID technology, a useful tracking and monitoring system can be designed that yields timely and meaningful intelligence to protect the public—yet offers parameters for privacy protection. The issue of privacy protection can be addressed by such measures as a Physical Access Control (PAC) policy.²⁶⁷

Due to the inherently illegal nature of criminal and terrorist related gun sales market systems, addressing such privacy concerns surrounding the tagging of guns may be less cumbersome and more straightforward. Despite this view, recent events, such as Fast and Furious, may have clouded public perceptions on the government's role in such instances of gun surveillance.²⁶⁸ If accepted and applied, such technology-based solutions would hopefully assist interdisciplinary anti-crime and terrorism approach efforts, as well as healthcare facility security concerns.

Perhaps the paradigm shift to using the term "gun misuse prevention" will help in creating a climate more conducive to such efforts to address gun misuse. Nonetheless, under existing laws, some provisions may allow for the inclusion of embedded RFID metadata tags into guns for identification purposes, which will be particularly useful after guns are lost, subjected to theft, or involved in criminal or terrorism-related misuse. The detection of guns via RFID or GTD would trigger an alert that would be similar in type to

²⁶⁷ Lu Tan and Neng Wang, "Future internet: The Internet of Things," in 2010 3rd International Conference on Advanced Computer Theory and Engineering (ICACTE) 5 (2010): V5–376.

 $^{^{268}}$ Louis Fisher, "The Law: Obama's Executive Privilege and Holder's Contempt: "Operation Fast and Furious," "Pres Stud Q Presidential Studies Quarterly 43, no. 1 (2013): 167–85.

the Amber Alert TM for an abducted child or a Low Jack TM signal alert for a stolen car.²⁶⁹ The thesis now delves into potential RFID and GTD gun misuse prevention approaches within the realm of criminal and terrorism-related straw, gray, and black-market gun enterprises.

5. The Overt and Covert Use of Real-time Geospatial Tracking Devices to Elucidate and Delineate Illegal Gun Markets

The literature reveals that thriving straw, grey, and black-market gun enterprises are involved in the sale of illegal guns within this nation and globally. The resultant massive profits realized by these illegal gun sales networks are often reflected in the pain, suffering, and bloodshed of innocent people. Add to these illegal gun market sales the number of lost and stolen guns within this nation and an increasingly dire image appears to emerge. The DOJ released a report, created by its Bureau of Alcohol, Tobacco, Firearms and Explosives, entitled, "2012 Summary: Firearms Reported Lost and Stolen." This report stems from one of the 23 executive actions noted by President Obama in his plan to reduce gun violence, announced on January 16, 2013. This plan called upon, "the Department of Justice to prepare a report analyzing information on lost and stolen guns and to make that report widely available to law enforcement." In the DOJ report, the ATF noted, "the lost and stolen firearms pose a substantial threat to public safety," as well as "law enforcement personnel." The ATF used the data submitted to the Federal Bureau of Investigation's (FBI), National Crime Information Center

²⁶⁹ Timothy Griffin and Monica K. Miller, "Child Abduction, AMBER Alert, and Crime Control Theater," *Criminal Justice Review* 33, no. 2 (2008): 159–176; William R. Reagan, "Auto Theft Detection System," U.S. Patent 4,177,466, issued December 4, 1979.

²⁷⁰ "2012 Summary: Firearms Reported Lost and Stolen," 2012, http://www.atf.gov/sites/default/files/assets/Firearms/2012-firearms-reported-lost-and-stolen.pdf.

²⁷¹ David Weigel, "Read President Obama's New, Proposed Executive Actions and Legislation on Guns, "The Slate Group, January 16, 2013, http://www.slate.com/blogs/weigel/2013/01/16/read _ president _obama_s_new_proposed_executive_orders_and_legislation_on.html; see also "Quinn Signs Major Legislation to Make Communities Safer and Keep Guns off the Streets Governor's 2013 Legislative Priority Closes Background Check Loophole and Requires Reporting of All Lost and Stolen Guns," August 18, 2013, http://www.highbeam.com/doc/1G1-340017399.html.

²⁷² Ibid.

(NCIC) on lost and stolen guns to complete the report.²⁷³ However, the report indicated that the supplied information was incomplete. The ATF, DOJ report noted that the raw data submitted by the FBI, NCIC to the ATF was not reviewed, screened for duplicate information, or corrected for subsequently found or recovered firearms by the FBI. The ATF stated, the "Reporting by law enforcement is voluntary, not mandatory, and thus the statistics in this report likely reveal only a fraction of the problem."²⁷⁴ As a result, the ATF also used lost and stolen firearm reports submitted to ATF by federal firearms licensees (FFL). The ATF noted that the FFL report was a more complete and reliable data set. All FFL lost or stolen firearms must be reported within 48 hours of the loss or theft. The ATF report also noted the potential for stolen and lost guns to enter the unregulated and illegal gun market system. Further, the report noted that the identifying serial number on guns are often obliterated by criminals who essentially render these weapons untraceable to their original manufacturer, licensed firearms dealer, and original purchaser. Many states also do not require the reporting by citizens of lost or stolen guns to law enforcement officials.²⁷⁵

The ATF report found that in 2012, 190,342 firearms were reported as lost or stolen to the NCIC on a national level. Of this number, 16,667 (9%) resulted from FFL-related thefts or losses, with 10,915 being lost and 5,762 being stolen. Pistols were the most common firearms stolen from FFL (3,322) in 2012, whereas the most commonly lost firearms by FFL were rifles (4,068). Texas was the top state reporting stolen or lost weapons, including those in the general public, noting 18,874 such losses or thefts. This number represents approximately 10% of the national total for lost or stolen firearms in 2012. Pennsylvania was the top state for FFL lost or stolen firearms, which amounted to

²⁷³ "ATF's National Tracing Center maintains FFL theft/loss reports in accordance with Title 18, United States Code Section 923(g)(6). ATF Firearms Trace Data Disclaimer-Public L. No. 112–55, Consolidated and Further Continuing Appropriations Act of 2012, Sec. 516: Firearms submitted for tracing are not entered into the tracing system for purposes of determining which types, makes or models of firearms are used for illicit purposes. Traced firearms do not constitute a random sample, and should not be considered representative, of the larger universe of all firearms used by criminals, or any subset of that universe."

²⁷⁴ "2012 Summary: Firearms Reported Lost and Stolen."

²⁷⁵ "2012 Summary: Firearms Reported Lost and Stolen."

1,502 reports, and represented 9% of the FFL firearm losses in 2012.²⁷⁶ Upon this literature review, it appears that the stage is then set for the enormity of issues stemming from lost or stolen guns that adds to the illegal gun sales markets within the national landscape.

The gap in the use of RFID and GTD identified within this thesis also appears to exist with its applicability to covert and overt operations within the illegal gun market systems. A clearer picture of how these networks are configured and operate apparently is needed that includes an uncovering of significant nodal points involved in the sustainment of such criminal or terrorist enterprise networks. It may also aid in the identification of these guns were they to be stolen or lost. However, it is important to note that the ATF, in the time period between 2006 and 2011 used a tactic known as "gunwalking," (aka, "letting guns walk").²⁷⁷ In utilizing this tactic, the ATF agents "[purposefully] allowed licensed firearms dealers to sell weapons to illegal straw buyers [within the Tucson and Phoenix, Arizona area], hoping to track the guns to Mexican drug cartel leaders and arrest them."²⁷⁸ The overall initiative was known as "Project Gunrunner," which tried to block the illegal flow of straw market guns from the United States into Mexico.²⁷⁹

"Operation Wide Receiver," (2006–2007), is stated to be the first known use of this tactic.²⁸⁰ The ATF used an informant to sell assault type guns and rifles, most of which were eventually lost to tracking efforts as they entered Mexico.²⁸¹ Apparently, based upon a subsequent DOJ, Office of the Inspector General (OIG) report, inadequate communication occurred between U.S. and Mexican-based law enforcement officials. The largest of these probes, called "Operation Fast and Furious," began on October 31,

²⁷⁶ Ibid.

²⁷⁷ David A. Kuhn and Robert J. Bunker, "Just Where Do Mexican Cartel Weapons Come From?" *Small Wars & Insurgencies* 22, no. 5 (2011): 807–834.

²⁷⁸ Kuhn and Bunker, "Just Where Do Mexican Cartel Weapons Come From?" 807–834.

²⁷⁹ Vizzard, Shots in the Dark: The Policy, Politics, and Symbolism of Gun Control.

²⁸⁰ Richard M. Aborn, "Battle Over the Brady Bill and the Future of Gun Control Advocacy, The," *Fordham Urb.* LJ 22 (1994): 417.

²⁸¹ Clem Coward, *Making the Merida Initiative Work* (Barracks, PA: Army War College Carlisle, 2012).

2009, and led to numerous arrests and convictions.²⁸² The operation was named such because some of the straw purchasers, who established a large network, used an auto repair shop as a "front" and raced cars as well.²⁸³ The Operation Fast and Furious strike force grew to include ATF, FBI, Drug Enforcement Agency (DEA), and ICE agents. It became apparent to ATF agents and the gun dealers that a failure to interdict and apprehend gun straw purchase buyers and their illegally purchased guns existed.

No arrests were being made even after being formally reported by the gun dealers to the law enforcement officials.²⁸⁴ Nonetheless, the continued use of this tactical approach occurred, unabated. However, not all dealers, or even ATF agents, felt comfortable with this tactic.²⁸⁵ Apparently, only about 710 of the nearly 2,000 guns tracked by the ATF were ever recovered and began appearing at crime scene sites.²⁸⁶ In an article by Rittgers, it was noted that this lack of recovery caused an international controversy that resulted in strained diplomatic relations between Mexico and the United States.²⁸⁷ Many Mexican officials reported being outraged by the ATF actions that they felt put Mexican citizens at risk. In addition, on December 14, 2010, U.S. Border Patrol agent Brian Terry was gunned down by a group of straw purchasers in Peck Canyon, Santa Cruz County, Arizona using one of the unaccounted-for ATF guns.²⁸⁸

Attorney General Holder was held in criminal and civil contempt by the Congress for failing to release documents in response to a subpoena request regarding Operation Fast and Furious that began under the prior Bush Administration. In several Congressional hearings, Attorney General Eric Holder reaffirmed that the operation was,

²⁸² Mary Cuddehe, *Agent Zapata* (Brooklyn, NY: Atavist Inc., 2012).

²⁸³ Stewart M. Young, "Going Nowhere Fast" (Or" Furious"): The Nonexistent U.S. Firearms Trafficking Statute and the Rise of Mexican Drug Cartel Violence," University of Michigan, *Journal of Law Reform* 46, no. 1 (2012): 1–67.

²⁸⁴ Vernick and Hepburn, "State and Federal Gun Laws: Trends for 1970–99," 345–411.

²⁸⁵ Dodson, The Unarmed Truth: My Fight to Blow the Whistle and Expose Fast and Furious.

²⁸⁶ Mouzos, "International Traffic in Firearms, Emerging Issues."

²⁸⁷ David Rittgers, "Mexican Criminals, American Guns," *National Review Online*, March 21, 2011, http://www.nationalreview.com/articles/262423/mexican-criminals-american-guns-david-rittgers2011.

²⁸⁸ Michael Krantz, "Walking Firearms to Gunrunners: ATF's Flawed Operation in a Flawed System," *J. Crim. L. & Criminology* 103 (2013): 585–985.

"flawed in its concept and flawed in its execution." President Obama's administration appears to have taken this situation seriously. Several limitations and sanctions regarding the use of such federal approaches were put in place.²⁸⁹ In this light, the question then arises as to whether it is globally and geopolitically feasible to use this RFID and GTD prevention technology for the detection and tracking of guns. Law enforcement officials may also challenge the traceability of guns worried about being detected themselves by criminal elements. A review of the literature in this regard notes that specialized shielding or signal disruption applications utilized to overcome this concern might be of help in this instance.

One potential option might be to mandate the use of RFID and GPD for newly manufactured and the retrofitting of existing guns for traceability purposes. Opposition to this idea, however, based upon a reading of literature, would most likely be fierce. The governmental burden to use such measures might be overcome should the private sector decide to use this concept as an additional safety and security option for the purchasers benefit. It may also assist in the recovery of lost or stolen law enforcement as well. The covert use of RFID and GTD tags might also produce a chilling effect with respect to guns sold within the illegal gun market systems should the purchasers feel that their guns are potentially marked and traceable in some way. The thesis now turns to the sale of potentially dangerous "toys" that do not always meet the classic legal definition of being a "gun." This sale includes so-called high-powered air and 3-D printable "guns." within the following section of the thesis for the purpose of simplicity.

²⁸⁹ Ibid.

²⁹⁰ Clare H. Cunliffe and J. Scott Denton, "An Atypical Gunshot Wound from a Home-Made Zip Gun—The Value of a Thorough Scene Investigation," *Journal of Forensic Sciences* 53, no. 1 (2008): 216–218; see also Laura E. Myre and Richard E. Black, "Serious Air Gun Injuries in Children: Update of Injury Statistics and Presentation of Five Cases," *Pediatric Emergency Care* 3, no. 3 (1987): 168–170.

²⁹¹ "Non-Powder Guns Policy Summary," October 28, 2013, http://www.smartgunlaws.org/non-powder-guns-policy-summary/.

6. Addressing the Use of 3-D Printed Resin and High-Powered Air Guns

Newer technological advancements in 3-D printing and high impact air guns have been transforming the landscape of potential gun-related misuse threats. The emerging 3D-gun prototypes are classified as non-firearms and, as such, tend to escape the traditional manufacturing and legal regulatory requirements. The fact that printable and high-powered air guns have the potential of being made at home by unlawful gun seekers is of grave concern.²⁹² Air guns are not a recent invention according to the literature. Historically, the oldest known mechanical air gun was created in about 1580 A.D.²⁹³ During the 1600s, air (pump) guns were used to propel projectiles at about 650 to 1,000 feet per second for hunting wild game animals, such as deer.²⁹⁴ Air guns were used in warfare in the 18th and 19th centuries, as they were quieter, without a vision obscuring or position signaling gunpowder flash or smoke and could be fired in wet conditions.²⁹⁵ The Girandoni Military Repeating Air Rifle, created by Bartholomaus Girandoni (1744– 1799), is noted to be a well-recognized example.²⁹⁶ This particular repeating air rifle is noted to have a tubular magazine with a 22 projectile (round; .51 caliber) capacity. It was stated that a skilled shooter could empty a magazine in about 30 seconds. Further, these projectiles could penetrate about one inch into a piece of wood at 100 paces. It was noted that this number is approximately equivalent to the power offered by a modern 9 mm or .45 ACP caliber pistol.²⁹⁷

Modern air pistols and rifles are grouped in one of three ways: spring-piston (metallic or gas piston), pneumatic (air pump or prefilled cylinder) or CO₂ gas

²⁹² Gary J. Ordog et al., "Homemade Guns," *Journal of Trauma-Injury, Infection, and Critical Care* 27, no. 6 (1987): 646–650.

²⁹³ Sheldon J. Bond, Gregory C. Schnier, and Frank B. Miller, "Air-powered Guns: Too Much Firepower to Be a Toy," *Journal of Trauma-Injury, Infection, and Critical Care* 41, no. 4 (1996): 674–678; see also an excellent review of air guns at *Wikipedia*, s.v. "Air Gun," accessed January 28, 2014, https://en.wikipedia.org/wiki/Air_gun.

²⁹⁴ Ibid.

²⁹⁵ Ibid.

²⁹⁶ Bond, Schnier, and Miller, "Air-powered Guns: Too Much Firepower to Be a Toy," 674–678; see also an excellent review of air guns at *Wikipedia*, s.v. "Air Gun."

²⁹⁷ Ibid.

(compressed, liquefied carbon dioxide).²⁹⁸ The types of ammunition used in these guns include such projectiles as pellets, "BB's," darts, and arrows. The use of darts and arrows in an air gun is similar to nails being used in a pneumatic nail gun.²⁹⁹ This type of air gun is usually homebuilt.³⁰⁰ The ATF notes:

The term "firearm" is defined in the Gun Control Act of 1968, 18 U.S.C. Section 921 (a)(3), to include:

(A) Any weapon (including a starter gun), which will, or is designed to or may readily be converted to expel a projectile by the action of an explosive; (B) the frame or receiver of any such weapon...Based on Section 921 (a)(3), air guns, because they use compressed air and not an explosive to expel a projectile, do not constitute firearms under federal law—unless they are manufactured with the frames and receivers of an actual firearm. Accordingly, the domestic sale and possession of air guns is normally unregulated under the Federal firearms laws enforced by ATF. 301

Despite the federal view, some state and local officials have passed laws and ordinances to regulate air guns. The Law Center to Prevent Gun Violence lists 23 states that regulate non-powder air guns to varying degrees. On its website, it is stated that some states define "all" (e.g., New Jersey and Rhode Island) or "selected" (e.g., Illinois and Michigan) non-powder guns as firearms, while others define them as "dangerous weapons" (Delaware, Connecticut, and North Dakota), or by prohibiting sales and transfers to children.³⁰² In Illinois and Michigan, all high-power and large caliber non-powder guns are defined as firearms, and have the same restrictions against sales to

²⁹⁸ Ibid.

²⁹⁹ Ibid.

³⁰⁰ Ibid.

³⁰¹ Internal Revenue Service, *Questions and Answers: Gun Control Act of 1968* (Washington, DC: Department of the Treasury, 1971); see also Harry L. Hogan, *Gun Control Act of 1968 Digest of Major Provisions, P. L. 90–618, 90th Congress, H.R. 17735, October 22, 1968* (Washington, DC: Library of Congress, Congressional Research Service, 1981).

³⁰² Law Center to Prevent Gun Violence, "Assault Weapons Policy Summary," May 21, 2012, "the inclusion in the list of features that were purely cosmetic in nature created a loophole that allowed manufacturers to successfully circumvent the law by making minor modifications to the weapons they already produced."

minors, felons, and other prohibited persons as do powder-based guns.³⁰³ Apparently, in San Francisco, California, a state preemption statute acted to strike-down existing legal restrictions placed on the use of air guns. In this instance, the San Francisco district attorney declared air guns legal if the guns were compliant with state laws.³⁰⁴

On a further reading of the literature, it appears that in regions where air and 3-D printable "guns" are not classified legally as guns, a potential gap might be present that allows for the safety and security concerns to be strategically addressed. Without being legally recognized as "guns," anti-gun advocates might fill the void by addressing safety and security concerns surrounding these "toy" gun-like items. That is, without "legitimate" pro-gun sentiments being expressed, as these air and 3-D printable items are not actually classified or legally recognized as being "guns." As Sun Tzu noted, in *The Art of War*, Chapter XII, "Attack by Fire," "There are suitable times and appropriate days on which to raise fires." ³⁰⁵ Further, in Chapter XI, Sun Tzu notes, "The doctrine of war is to follow the enemy situation in order to decide on battle." ³⁰⁶ This statement may potentially be applicable to gun surveillance and monitoring to identify points of intervention to ensure public safety and security regarding the use of high-powered air and 3-D printable guns.

³⁰³ G. C. Brown, W. S. Tasman, and W. E. Benson, *Standard Consumer Safety Specification for Non-Powder Guns* (ASTM F589-85) (Philadelphia: American National Standards Institute, 1985), 5.

³⁰⁴ Mark Follman, Tasneem Raja, and Ben Breedlove, "The NRA Surge: 99 Laws Rolling Back Gun Restrictions," Mother Jones, September 26, 2012, http://www.motherjones.com/politics/2012/09/map-gun-laws-2009-2012.

³⁰⁵ Sun Tzu, *The Art of War* (Denver, CO: Orange Publishing, 2013).

³⁰⁶ Ibid.

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III. GUN MISUSE RESEARCH METHODOLOGY

A. INTRODUCTION AND A LISTING OF THE FIVE THESIS RESEARCH QUESTIONS

- DO commonly held disciplinary, as well as public misperceptions and impediments to discourse exist regarding why, where, when and with whom, gun misuse-related injuries and deaths occur?
- How do the homeland security, legal and healthcare disciplines perceive, define, interpret, and approach the issues surrounding gun misuse-related injuries and deaths?
- Would a paradigm shift in terminology to gun misuse prevention lead to a better understanding of the factors that tend to shape inappropriate, as well as appropriate disciplinary approaches to gun misuse?
- Would the creation of an interdisciplinary perspective and the sharing of disciplinary information provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse?
- Can public and private partnerships assist in addressing the occurrence of gun misuse-related injuries and deaths?

This chapter of the thesis describes the selection and collection process for obtaining the literature and data sets reviewed and utilized, as well as the analysis process performed. The thesis research questions not only served as points of inquiry but also helped to delineate and shape further the literature and data selection process, as well as the ultimate form and structure the thesis itself became. In addition, patterns and themes appeared to emerge during the literature review and analysis process. A closer examination of the thesis structure reveals that the components of the Chapter II (Literature Review), Chapter IV (Results) and Chapter V (Findings, Conclusions and Recommendations) are organized in parallel, each with exactly the same topical headings from A to H.

The purpose of this arrangement is to allow the reader to focus on any of the five questions of particular interest posed by this thesis. The reader is then able to move across the chapters under any given heading (A to H) to focus on the issues raised by that specific thesis question.

The conclusions drawn and recommendations made were then finalized and documented within the body of this thesis. This thesis for the most part takes the form of a qualitative study that utilizes non-numerical, narrative data in an attempt to describe what the literature notes in reference to the questions raised within this thesis. Traditional and cultural perspectives and experiences of the public, as well as government officials, academic researchers and the healthcare, homeland security and legal disciplinarians, are analyzed to determine if some degree of light can be shed on the questions raised within this thesis. The approaches to the issue of gun ownership, use, and misuse as viewed within the literature is potentially reflective of how the issue of gun misuse is addressed and handled by these individuals in practical real world situations.

B. RESEARCH SETTING OF THE THESIS

The setting for the research study involved literature searches at the Dudley Knox library at the Naval Postgraduate School, the University of Chicago library, the Harold Washington library, the Chicago State University library and On-line database, academic and media sources.

C. SAMPLING METHODOLOGY FOR THE LITERATURE REVIEWED

The shift in terminology from "gun control" to "gun misuse prevention" allowed for a more expansive, non-random, and purposive sampling of the literature to be performed in a more effective and efficient way that was centered upon the five research questions indicated previously. A concerted attempt was made to obtain information from governmental and academic institutional sources that are noted to be reliable by scholars. However, documents that presented polarized views regarding guns were also used to gain a clearer perspective on various dimensions of both public and private perceptions regarding gun ownership, use, and misuse.

D. INTERVENTION

During the early stages of the literature search, an opportunity emerged for a preliminary reframing of the term "gun control" to one of "gun misuse prevention." This shift in terminology was made to facilitate a clearer and widened perspective concerning

the inappropriate use of guns. In effect, it also conformed to and was coupled with Cynefin theoretical considerations that appeared to move the issue of inappropriate gun use from the complex to the complicated region of the Cynefin model. It then allowed for a deeper probing and analysis of the issues, as well as literature associated with the research questions at hand concerning gun misuse. Such a step also parallels an inductive reasoning process. The literature covered a vast array of sources, including governmental executive, legislative, judicial, and agency sources. It also included gun-related historical, media-derived, trade and advocacy group articles, and documentation.

E. DATA COLLECTION/PROCEDURES

A literature review was performed to collect reliable and scholarly information and data, as well as to discern public and private views concerning gun misuse. Of note was the quality and reliability of information sources that have implications regarding the internal validity, as well as any future degree of external validation that may be realized concerning the conclusions drawn from this thesis. The primary goal was to reveal how and why the relationship the public has with gun ownership and use originated, evolved, and exists presently to include what steps can be taken to address and prevent gun misuse. The narrative data and perspectives from various literary sources, both within libraries and on-line, were transcribed, encoded, and assembled into tables and figures. Invaluable instructional information was also gained during classroom instruction and didactic sessions at the Naval Postgraduate School. This guidance and exposure to varying perspectives allowed for a deeper analysis of the various component factors concerning gun misuse.

F. DATA REVIEW AND ANALYSIS

An analysis of the issues surrounding gun misuse relied upon an initial paradigm shift from "gun control" to "gun misuse prevention." It relied upon a widened perspective and higher degree of clarity concerning the cultural and historical dimensions of gun ownership, use, and misuse. In addition, the clarification of obstacles to discourse and actions taken to address gun misuse were essential. It allowed for a proper focus to be placed upon the actual causes of gun misuse related injuries and deaths. It then served as

a backdrop for the environment in which the homeland security, legal, and healthcare disciplines must contend with the consequences of gun misuse. An examination of the cultural climates within each of the disciplines was explored in relationship to their orientation to gun misuse. The thesis presents ethnographic and quantitative data as well. It then served as the basis for suggested interdisciplinary approaches to address gun misuse from a prevention-centric safety and security perspective. The importance of, and the need for, public-private partnerships were explored within the body of this thesis. Based upon the literature review findings and analysis, conclusions, and recommendations concerning gun misuse were drawn and documented in a narrative format.

IV. RESULTS

The following is a summation of the results drawn from the literature review and analysis process. A significant literature review finding was that avoiding the temptation and tendency to reinvent the wheel is prudent from fiscal, resource, and timeliness perspectives. To this point, several coexisting disciplinary policies, conceptual views, tools and approaches appear to be used to address the issues surrounding gun misuse. Existing relationships within the homeland security, legal, and healthcare disciplines have the potential to be become the source of the requisite support needed for effective and sustainable interdisciplinary collaboration and the leveraging of the resources.

A preliminary step recommended by this thesis was the use of a paradigm shift in terminology from that of "gun control" to "gun misuse prevention." It was used to quench the flames of polarization and divisiveness surrounding the use of the term "gun control." The underlying the polarization serves to obscure the actual issues surrounding gun misuse. For this reason, the misperceptions and impediments to discourse concerning the issue of gun misuse were explored and examined to facilitate a more effective quantitative literature selection and review process. It was ultimately found to be an effective way to approach the five research questions presented within this thesis.

What follows are the results stemming from the quantitative literature review research process performed within the context of this thesis. The results that emerged from this process allowed for the development of the findings, conclusions and recommendations noted in Chapter V. An attempt is made to answer the five thesis research questions presented within this thesis concerning gun misuse prevention.

Do commonly held disciplinary, as well as public misperceptions and impediments to discourse exist regarding why, where, when, and with whom gun misuse-related injuries and deaths occur?

A. HOLDING ONTO MY AMERICAN GUN: HISTORICAL PERSPECTIVES ON GUN OWNERSHIP AND USE

A literature review result was that the arguments supporting gun ownership and use, purely based upon historical precedents, are often problematic. This reliance can

apparently give rise to polarized viewpoints, gridlock, and even complacency and inertia when confronted with issues involving gun ownership and misuse. This finding appears to threaten not only progress with respect to gun misuse prevention efforts, but also the establishment of the proper balance of public liberty and security. The literature review appears also to reveal that at times it may result in the turning of a blind eye to the tragic consequences and social injustices surrounding the issue of gun misuse.

In spite of these complex controversies and polarized viewpoints regarding gun misuse, it appears that the government still has a duty and role to play in assuring the equal protection, safety, and security of all members of the public. The literature review revealed that the nation's Forefathers harbored grave concerns about the ability and adequacy of the public to conduct the affairs of this nation if left to their own devices. Germane to this thesis is the question of whether gun owners and the public, through selfregulation, are able and can be trusted to discern between safe practices and the reprehensible or dangerous with respect to gun ownership, handling and use. Nonetheless, it appears that the literature tends to lean in the direction of supporting the need for some form of governmental gun ownership oversight and regulation. This perspective regarding the need for the regulation of arms also appears to be emboldened within the Second Amendment of the Constitution. It appears that several potential avenues exist within the literature for the regulation of the safe and secure use and handling of guns. It may take the form of government legislation to improve existing disciplinary approaches and the governance of public-private sector partnerships devising technological approaches to ensure gun safety and security.

A fundamental U.S. government duty is the protection and preservation of public safety and security, as well as liberties and rights. Lieutenant General Russel L. Honore, (USAR, Ret.) noted: "the very purpose and existence of government is for the provision of collective security." ³⁰⁷ As part of this duty, it appears that the government must also address threats involving or directed at the public related to gun misuse. To accomplish

³⁰⁷ Russel L. Honore, *Survival: How Being Prepared Can Keep You and Your Family Safe* (New York: Simon & Schuster, Inc., 2009): 223.

this goal, proper governmental oversight of carefully crafted and balanced gun misuse prevention approaches appears to be required.

Direct stakeholder involvement appears to be essential for success.³⁰⁸ It involves not only paying attention to constitutional but cultural perspectives as well. It is important exactly how the various disciplines ultimately go about choosing and implementing any potential gun misuse prevention approach. Further, for people to willingly follow a leader they have to feel as if they are a part of the process and the overall team.³⁰⁹ It is also important that the stakeholders perceive, accept as legitimate, and place trust in the prevention-centric approaches developed to address gun misuse. To begin this process of communication, it appears imperative to address some of the misconceptions and impediments to discourse as a preliminary step.

B. MISPERCEPTIONS AND IMPEDIMENTS TO GUN MISUSE DISCOURSE

What follows are the results of a literature review and analysis based upon a probing and discernment of some of the more salient impediments to the discourse regarding gun misuse.

1. The Legal and Illegal Gun Market Systems

Guns are sold through regulated legal (legitimate), as well as illegal (illegitimate) straw, gray, and black-market systems. Yet, scrutiny does not always appear to extend to the purchaser at the point of sale in legal, as well as illegal gun markets. The existence of poorly regulated gun markets has been the bane of many legal system and government operatives charged with regulatory oversight who must respond to the consequences of gun misuse. Importantly, such negative views concerning instances of gun misuse associated with concomitant regulatory failures may also be shared and supported by gun owners as well. Conversely, the polarization created by both pro and anti-gun advocacy

³⁰⁸ William Bratton and Peter Knobler, *In Command: America's Top Cop Wins Back the Streets* (New York: Random House, 1998).

³⁰⁹ Russel L. Honore, *Leadership: In the New Normal* (Lafayette, LA: Acadian House Publishing, 2012): 23–33.

groups may act to unknowingly shield those involved in gun misuse and illegal gun markets by preventing governmental and law enforcement attempts to address and prevent gun misuse. The protective shielding effect may actually be initiated, fueled, and sustained by media streams that support and strengthen the existence of the underlying advocacy group polarization around gun misuse. Thereby, the media unintentionally adds to the protection of those involved in gun misuse, as well as illegal and poorly regulated legal and illegal gun market systems.

2. A Balancing Act: The Constitution, Declaration of Independence, and Gun Misuse

It appears that gun ownership and use supporters often assert the view that the Second and Fourth Amendments serve as shields against the infringement of their rights and the potential confiscation of their guns, even by the governmental authorities. Apparently this view existed even during the Civil War between the states, where a gun was used by one member of the public against another member of the public.

A balancing act between the Constitution and a document commonly referred to as, "The Declaration of Independence," seems to provide some insights during the literature review and synthesis process in this regard. The Declaration of Independence states that unalienable rights include life, liberty, and the pursuit of happiness. The exact number and nature of these rights was apparently not fully enumerated and addressed. Gun ownership was not specifically mentioned in this document. Despite this omission, it appears gun supporters assert that guns are tied to the security and preservation of the rights to life, liberty, and the pursuit of happiness.

With respect to gun misuse by one member of the public against another the thesis analysis process initially had difficulty in determining exactly how this issue fit in and should be viewed. However, it appears that the later addition of the Fourteenth Amendment Equal Protection Clause of the Constitution may have served to underscore a position contrary to the gun owners using the Second and Fourth Amendments as shields. That is, if viewed as leaning in the direction of the Declaration of Independence with the intent of ensuring the existence and preservation of domestic peace and tranquility.

The attempt by gun owners to co-opt the Second and Fourth Constitutional Amendments that appears to act as a requisite balancing point for liberty and justice may deprive other members of the public of their right to equal protection under the Second and Fourth Amendments. Under the Second Amendment, those with guns must be regulated as part of a militia presumably to ensure domestic life, liberty, and the pursuit of happiness, peace, and tranquility. Such a view would seem conceptually to support the position taken within this thesis that life, liberty, and the pursuit of happiness often perish in the smoke of gun misuse aftermaths, particularly when it is between members of the same republic.

It appears that the current winds of media driven propaganda and sensationalism may tend to skew public opinion in a direction that violates the existence of these basic, unalienable public rights. Albert Einstein, as noted in the literature section of this thesis, intimated that domestic peace and tranquility were not attainable by a people who always kept the thought of war in mind.

Upon a review of the literature, it appears wise to keep in mind what Dahl has to say about this issue. Dahl noted that the restoration of the fundamental balance between liberty and security has been delayed after the 9/11 attacks, leaning in the direction of increased governmental power. It appears that it is not that either liberty or security are unimportant, but that they must both be properly balanced for domestic peace and tranquility to exist and flourish. When an imbalance exists that leans in the direction of greater safety and security, liberty may be the ultimate victim. Conversely, when liberty is not checked, public safety and security are then compromised.

The growing polarization in the gun debate appears to represent an example of how the struggle to rebalance liberty and security after 9/11 noted by Dahl can affect domestic policy. Further, when viewing the issues surrounding gun misuse and this nation's involvement in wars, the guiding principles within the Declaration of Independence and Constitution that attempt to balance liberty and security properly seem inescapable.

These views are vitally important to consider when devising gun misuse disciplinary approaches. It is especially true during a time when pro-gun sentiments may be fueled by the occurrence of criminal and terrorist related activities. In addition, as noted by Dahl, during a time when a perceived over-bearing governmental authority exists that has been unable to reestablish the correct balance between liberty and security. These points are very germane to the purpose of this thesis in its approach to addressing gun misuse.

Another potential source serving as an impediment to discourse concerning gun misuse is the role the media plays regarding views on gun ownership, use, and misuse.

3. Gun Use and the Media

The media has played a historical, deeply rooted and significant role regarding the ways in which the general public views guns. These views appear to include homeland security, law enforcement, and legal, and healthcare disciplinarians as well. Those wielding guns have been both gloried and vilified within media sources, such as movies, magazines, newspapers, and on-line reports. The media often glorifies soldiers and vilifies assassins. Yet, the media may at times also vilify police officers while glorifying mobsters like Al Capone or vigilantes who act without legal authority.

The literature presents evidence that propaganda concerning gun misuse within this nation's traditional media streams may influence how gangs, criminal enterprises, and terrorist organizations see the world in a negative light. The media has also had a very positive role to play in its coverage of such historical events as the civil rights movement. The literature also provides instances where the media often presents the shield of the First Amendment right to free speech that can apparently topple or impede the re-balancing between liberty and security at times. The thesis now moves to present the literature review results related to a congressional ban on gun violence research conducted by the CDC.

4. A Governmental Ban on Gun Misuse Research

The CDC conducted gun-related research that Congress perceived to be a politically motivated attempt by the CDC to exert a form of control over public ownership and the use of guns. The literature review found some conflicting judicial opinions regarding the approach taken by Congress. Nonetheless, the response apparently resulted in an impediment and associated chilling effect on further discourse and research within the public health domain and the at large scientific community. It appears that progun advocacy groups and organizations lobbied and helped to bring this congressional ban on gun violence research into fruition. Of note, the literature review reveals that the National Rifle Association (NRA) actually began as an organization directed at the assurance of the safety and security of its members when handling and firing their guns. It may be an important point to remember when confronting polarized viewpoints concerning gun misuse prevention.

5. Approaches to Gun Misuse and Disciplinary Conflation

The literature review reveals a conflation of overlapping disciplinary roles and responsibilities at the crossroads of confronting gun misuse aftermaths. Also, the homeland security, law enforcement, and healthcare vision and mission statements are structured and conceptualized in a similar fashion with respect to protecting the public. However, notable differences exist with respect to the cultures and perspectives that each of these disciplines tends to embody. The DHS is comprised of multiple agencies. Its existence as a department was formulated and conceived in the wake of the 9/11 terrorist attacks. Although the process has not always resulted in a success story, some notable gains have been made in developing an atmosphere of collaboration in some areas. A wealth of information has been created and is housed within the DHS to include documentation regarding the ICS, NIMS, and NRF guidelines. The legal and healthcare agencies also have volumes of information and data that are brought to bear on the issues surrounding gun misuse and violence. Sorting the various viewpoints, roles, and responsibility with collaboration in mind is essential for progress to be made with respect to agency efforts centered upon gun misuse prevention.

6. Nationalism: A Potential Impediment to Gun Misuse Discourse

A comparative literature review and analysis was performed in an attempt to discern whether potential lessons can be learned from the approaches taken to address gun misuse within other nations. The literature search was limited to other industrialized nations facing issues similar to those encountered by the United States. Specifically, the literary articles reviewed related to gun ownership and use in Canada, the United Kingdom, and Australia. Of the countries selected, the United Kingdom has the most restrictive gun laws and prohibits gun ownership by members of the general public. The United States is noted to have the least restrictive gun laws and also the most guns per capita of the countries studied. Canada appeared to have a system that was most similar to that of the United States, including the allowance of its citizens to own and use guns. However, Canada requires both gun owner registration and gun use training prior to licensure unlike the United States.

The United States was noted to have the highest gun-related death rates for suicide and homicide. U.S. statistics seem to at least put into question pro-gun policies that support the notion that the presence of more guns would necessarily translate into a higher degree of public safety and security. In another international polling study concerning the need for greater gun regulation, the one consistent demographic across the United States, United Kingdom, and Canada was gender. Women were much more likely than men to support stricter gun control laws and regulations even within the United States.

A review of the literature suggests that nationalism could tend to impede the discourse between nations concerning gun misuse prevention. For example, it might be an insurmountable obstacle to further discourse for someone in the United States to suggest a complete gun ownership ban similar to that imposed by the United Kingdom. It may not allow them to see any of the benefits of the UK legislation that surrounds the imposition of this ban or policing actions. Canada has laws more similar to the United States than those within the United Kingdom. Canada does have an assault rifle ban that is qualitatively different from the United States, but it is much less qualitatively significant than the complete gun ban in the United Kingdom. On a quantitative level,

both the United States and Canada have a large number of guns, while the presence of guns appears to be rare at best in the United Kingdom. Yet, both the homicide and suicide rates in Canada are a fraction of what they are in the United States. More research apparently needs to be conducted to determine if it is evidence of effective gun registration and training policies including the assault weapons ban or due to some other culturally-based or idiosyncratic factor(s) deserving closer attention.

• How do the homeland security, legal and healthcare disciplines perceive, define, interpret, and approach the issues surrounding gun misuse-related injuries and deaths?

C. GUN MISUSE AS A HEALTHCARE DISCIPLINARY ISSUE

The literature review indicates that the healthcare system must contend with the consequences of gun misuse on a daily basis. Healthcare disciplinarians are charged with an attempt to minimize the degree of disability and resultant deaths arising from the misuse of guns. Healthcare professionals must also address the mental health concerns and social ramifications afflicting those family and community members closely involved with the victim's care. The literature indicates a tendency exists for gunshot victims to return for repeated episodes of gun violence should they survive the previous encounters. The thesis now turns to present the results from the literature review process concerning a healthcare perspective on gun misuse that begins with an examination of gun misuse-related injury and death rates.

1. Gun Misuse-related Injury and Death Rates

The literature review indicates that the homicide rate is apparently on a decline nationally. A review of the literature reveals that the homicide rate in Chicago for the year 2014 was 432, which is compared to homicide rates of 828 in 1995, 633 in 2000, and even 498 in the year 1928. The homicide rate does not take into the aggravated assault rate that is significantly higher than the homicide rate. In addition, from a healthcare perspective, the very presence of a vast number of guns in society appears to be analogous to a "floating iceberg model" in which the agents of injury and harm lay dormant beneath the surface of expression until an outbreak occurs, in this instance, gun misuse-related violence. The literature indicates that the homeland security, law

enforcement and healthcare disciplines feel that they have a duty to protect each member of the public. A common interdisciplinary vision concerning the issue of gun misuse prevention also appears to be necessary. A review of the literature reveals that the leading causes of gun-related deaths are suicide and accidental shootings, i.e., not homicide. An open dialogue between these disciplines concerning the issues of suicide and accidental shootings seems to be lacking. The healthcare system itself appears not to be immune to the effects of both intentional and random gun misuse and violence.

2. The Impact of Gun Misuse on Healthcare Resources

Hospital emergency departments and parking lots often serve as the sites of gun violence. It is noted in the literature that hospital employees are approximately four times more likely than other private sector workers to be the victims of assault. The literature appears to indicate a lack of consistent planning and training of hospital employees regarding how to respond to the presence of a gun or gun related shooting. In fact, the literature indicates that laws prohibiting the carrying of a lawfully owned and concealed gun into the hospital environment apparently do not exist in most states. Healthcare workers are apparently often not even trained on what to do if they discover that a visitor has a gun.

Trauma center availability and access is apparently inadequate according to the literature, which is especially true in impoverished areas where the access to a trauma center is more likely to be needed due to a relatively higher level of gun violence. The literature supports the notion that the average gunshot victim places enormous strains on the fiscal operations of the hospitals choosing to maintain a Level I trauma center. Yet, it also appears that the unwillingness of a hospital to provide trauma center services can work to erode public trust in local hospitals. The challenges that guns present for healthcare settings appear not to receive adequate legal, homeland security, and legislative input and support. Nevertheless, it does appear to be a commonly held public duty of the government, legal, and homeland security disciplines to protect patients, visitors, and healthcare providers.

3. Suicide: Standing in the Shadows of Taboo and Homicide

The literature review synthesis process calls directly into question the very use of such terms as "gun control" with its emphasis on intentional inter-personal homicide. Even the location for framing the larger issue of gun-related deaths appears to be incorrect. Suicides occurring within the home environment represent the leading cause and location for gun-related deaths. This conclusion appears to call for a change in perspective regarding mental and behavioral health issues and a refocusing on the actual causes and operational location for a majority of gun misuse-related injuries and deaths. The existence of societal taboos against discussing suicide, as well as inaccurate media driven portrayals also appear to be deeply engrained in society. These perceptions concerning suicide must be further explored to address gun misuse properly. The thesis now moves on to discuss behavioral modification approaches to gun misuse.

4. Behavioral Modification Approaches to Gun Misuse

This thesis takes the position that the issues surrounding mental health might be particularly problematic to contend with when they occur within the context of an unfamiliar, complex, and asymmetrical threat environment. Yet, at the same time the detection of behavioral clues for those with suicidal tendencies or a proclivity for gun misuse is lacking and apparently needed from a prevention standpoint. A number of programs are presented in the literature that may be of benefit in this regard. Some programs, considered ineffective and potentially deleterious, should be discontinued. The thesis now turns to the legal system with respect to gun misuse.

D. GUN MISUSE AS A LEGAL SYSTEM DISCIPLINARY ISSUE

Law enforcement officers, as well as the court systems routinely confront the issues surrounding gun misuse-related injuries and deaths. The review of the literature indicates that the legal system often operates within communities where poor education, inappropriate behavioral choices, and gun misuse appear to serve as preludes to the development of dire social consequences, as well as poor health outcomes. In addition to facing the often complicated and even complex issues involved in gun misuse, the

community landscape may also serve as a harbinger for gang, criminal, and terrorism-related enterprises and activities.

The literature points to the necessity for law enforcement officers to develop positive relationships with community members to garner the support required to meet the justice related goals ensuring public safety and security. Nonetheless, the mechanisms and to what degree various public needs are ultimately being met by the legal system with respect to instances of gun misuse are more obscure within the literature reviewed.

The ideological viewpoints and realities of previously remote and isolated rural, as well as inner city urban communities appear to admix upon the national media stage with respect to views regarding the legal system. It appears to have the potential for the creation of positive, as well as negative impacts on these communities. The literature review also reveals the occurrence of jurisdictional disarrays and cross-disciplinary conflicts within the legal system with respect to their roles and responsibilities regarding gun misuse. Some articles also speak to the inability of law enforcement operatives to adapt continuously to such a variable and complex landscape of gun misuse behaviors and cultural perspectives.

1. Crime and Public Safety

Gun misuse safety and security concerns, as documented in the literature, seem to be commonly shared by nearly all members of the public. The ability to prevent, as well as respond, to the threat of gun misuse is becoming of paramount importance to the general public and private sectors, as well as safety and security officials. This thesis performed a literature review to gain potential insights into how the legal system operates within this context to deal with gun misuse. The term legal system as used within this thesis is inclusive of law enforcement officers in addition to members of the judicial system.

It must be emphasized that the literature reveals the number of gun-related homicidal deaths pale in comparison to the number of deaths related to suicide each year. It is also apparently essential to weigh carefully the components of gun misuse safety and security approaches against the constitutional protection of individual rights for gun

possession and ownership. The proper balancing of gun owner and gun misuse victim rights appears to be required that must be accomplished while quenching the existing, emotion-based pro and anti-gun polarization. Gun misuse prevention must be approached strategically to lay the groundwork essential for addressing approaches to gun misuse prevention.

2. Addressing Gun Misuse through Incarceration

A societal response to gun misuse has apparently taken the form of building prisons to house "offenders" and those "too dangerous" for a continued societal presence. The literature review and analysis revealed that the incarceration approach taken appears to be illogical, to a large extent an invalid approach to gun misuse, and ultimately, nonsustainable.

It must be cautioned, however, that a curative healthcare approach may be deemed inappropriate at times by the legal and homeland security disciplines; for example, with capital crimes involving defenseless children. It may be an instance where corporal and capital punishment are deemed appropriate by society. The thesis now turns to the intersection of criminal and terrorism-related activities involving gun misuse.

3. The Gun Misuse Nexus with Gangs, Smuggling, and Terrorism

It appears that criminals, and even terrorists, after the commission of horrendous harmful acts with blaring guns against the public and government, attempt to cling to constitutional rights protections for their own personal defense when brought to justice. In addition, the literature reveals that the individual at the trigger of a gun is either vilified or glorified depending upon the context in which the gun is being used. Gunwielding gangsters, smugglers, and thieves are often portrayed in the movies and are idolized as iconic figures worthy of movie star status. Clandestine audiences in a likewise fashion also appear to applaud the deplorable actions of overseas and homegrown criminals and terrorists.

It appears that in-group and out-group perspectives would have to be taken into account when approaching viable solutions to gun misuse. The thesis literature review

revealed the existence of knowledge gaps in exactly why and how these armed individuals and groups actually are sustained and operate. More research needs to be performed in this regard as it relates to gun misuse behavioral motivations. The thesis now turns to governmental executive and legislative attempts to address gun misuse.

4. Presidential Executive Orders and Congressional Acts

The FAWB, the NFA, the Cleary Act, and the Brady Bill represent legislation as seminal and essential documents for creating a clearer understanding of policies and legislation regarding gun misuse. It appears that these executive and legislative documents contain academically based gun misuse research data and conclusions from a broad spectrum of disciplinary experts. It also includes the testimonies and perspectives of homeland security, law enforcement and healthcare officials and advocacy group representatives attempting to contend with the issues surrounding gun misuse. It may represent the de facto creation of the type of collaborative structure called for within this thesis.

a. Too Dangerous for Public Use: Switchblades and Brass Knuckles

Switchblade and brass knuckles use and possession still remain outlawed by congressional act on all federal and tribal lands, as well as in many states, according to the literature. However, within the same congressional act, Congress recently failed to ban AK 47 assault rifles as being too dangerous for public use. Yet, despite running the same sort of legal gauntlet of constitutional challenges, as occurred for banned automatic knives and brass knuckles, the ban on assault rifles in the United States has not prevailed to date. Despite the long and tumultuous battle for those wishing to pursue the banning of assault rifles, the literature reveals that some lessons may be learned from Canada where just such a goal was achieved. In this regard, gun-related terminology is of utmost importance.

b. Exploring the Utility of a Change in Gun Misuse Terminology

The use of Cynefin theory within this thesis facilitated a change in terminology concerning the inappropriate use of guns, from that of "gun control" to "gun misuse

prevention." This change allowed the movement of the issues surrounding the misuse of guns to move from the complex to the complicated region of the Cynefin model. It appears to have provided an ideal platform to clarify the issues surrounding gun misuse to a greater degree. As a result, it thereby provided for a greater depth of analysis of gun misuse issues as viewed through the literature selection and review process. In particular, the use of this framework helped to elucidate and clarify the issues surrounding various homeland security, legal, and healthcare approaches to gun misuse prevention. By allowing this usage to occur it also paved the way for the potential development of best interdisciplinary practice approaches to support the goal of the prevention of gun misuse. In addition, the widened perspective brings to light issues concerning the effects of polarized views and misconceptions regarding the issue of gun misuse, as well as views on gun-related injuries and deaths. For example, this approach allowed for the refocusing of attention to the predominant cause and location of gun-related deaths, which is suicide in the home and secluded environments.

The use of this framework during the literature research process was also directed at an examination of the potential for the development of public-private partnerships to address gun misuse.

5. Emphasis on Criminal Prevention and Intervention

The literature review reveals a distinct homeland security, legal, and healthcare disciplinary overlap, on both the theoretical and practical levels, concerning views held regarding gun misuse-related behaviors. Abundant literature exists concerning attempts to prevent an individual's progression into criminal or terrorism-related behaviors and activities. In fact, the literature review performed within this thesis revealed that attempts to eliminate the potential for an individual's progression into criminal and destructive, subversive group membership and activities can be a daunting task at best. Nonetheless, the importance of paying attention to the emergence, development, and adoption of gun misuse behaviors is critical to addressing and ensuring gun misuse prevention goals are met.

A seminal document was the 2001 Surgeon General's report. It appears to be an especially important document for those wishing to address violence and gun misuse behaviors. Despite its release over a decade ago, it appears the warnings concerning the ineffectiveness and potential harms imparted by some behavioral approaches to violent behavior and potential gun misuse participants have gone unheeded. In fact, these very ineffective or even harmful programmatic approaches listed within this document, which was highly scrutinized and scientifically validated, and are still utilized to this day. The thesis now turns to discuss the results of the literature review regarding gun misuse from the perspective of social justice and public resiliency.

E. GUN MISUSE PREVENTION AS A SOCIAL JUSTICE AND PUBLIC RESILIENCY ISSUE

The thesis explored the literature to gain an understanding of how disparate social circumstances may be linked to the misuse of guns and its harmful consequences.

1. The Intersection of Gun Misuse with Poverty, Education, and Social Equity

From a reading and analysis of the literature, it appears that those individuals who are unable to adapt to a changing environment are left behind in the wake of change and challenging circumstances. It appears that often these individuals become more vulnerable, mistrusting and incapable of continued societal participation. Those with mental health issues appear to be potentially more dramatically impacted by such circumstances. The literature review and analysis performed also revealed a significant overlap in the occurrence of gun misuse with these vulnerable subpopulations including those with substance abuse disorders. At the same time, stereotypes, biases, misperceptions, and impediments to discourse when approaching gun misuse and its aftermaths may actually be serving to shift complicated matters into a more complex arena.

2. The Dilemma of Defining the "Perpetrator" and the "Victim"

In general, the literature appears to depict a perpetrator of an intended crime as unlawful and the victim as the one who bares the negative consequences of the perpetrator's actions. It seems apparent with an overt criminal act, such as when a bank robber shots an innocent bystander. Despite this view, it appears that this distinction between the perpetrator and victim often becomes obscured during the application of both policy and enforcement actions. For example, a burglar may sue the homeowner after slipping down broken stairway steps or falling "victim" to a homeowner created booby trap. From a reading of the literature, it appears that such a distinction between perpetrator and victim can become even less discernable; for example, as in the case of suicide where the perpetrator and victim could be perceived as being one in the same.

How an individual is labeled, either as a "victim" or a "perpetrator," appears to engender implications with respect to the significant and often dire consequences that result. The homeland security and legal disciplines appear to attempt to create clear and exact distinctions between the roles of the perpetrator and the victim. The basis for having to definitely classify an given individual, or group of individuals, as "perpetrator" and "victim" may stem from the homeland security and law enforcement officers having to make sometimes split second decisions during the actual unfolding of responses to gun misuse. This form of misclassification may carry over into other perspectives and perceptions held by these safety and security officers. This polarized view can be problematic when approaching issues that require a greater degree of discernment of the nature of a particular individual involved in a gun misuse situation.

3. Would a Paradigm Shift in Terminology to Gun Misuse Prevention Lead to a Better Understanding of the Factors that Tend to Shape Inappropriate, As Well As Appropriate Disciplinary Approaches to Gun Misuse?

The literature review reveals that homeland security, legal, and healthcare disciplines are all focused upon the issue of gun misuse from their unique perspectives. It appears that at the crossroads of their approaches to gun misuse, potential opportunities exist for collaboration. Each of these disciplines has lessons and data that could potentially provide cross-disciplinary benefits. The literature search and analysis process also appears to support and validate the view that the paradigm shift from "gun control" to "gun misuse prevention" used to reframe the issue of gun misuse was beneficial in the

analysis process. This paradigm shift aided the process by clarifying the issues surrounding gun misuse, as well as the approaches taken by the homeland security, legal and healthcare disciplines. Thus, the foundation was laid for discerning whether and to what degree interdisciplinary collaboration should be earnestly striven for, is actually achievable, or even desirable, as well as the reliability of current disciplinary approach practices.

F. THE UTILITY OF A PARADIGM SHIFT IN GUN MISUSE TERMINOLOGY

At first glance the issue of "gun control" appears to exist in the realms of the complex or even chaotic (Cynefin), "global problematique" (Ozbekhan) or "wicked problem" (Churchman). See Appendix F for further information on these theories.

1. Gun Misuse Terminology: A Shift from the Complex to the Complicated

This thesis presents a lens through which a wider view of discipline-based approaches to gun misuse is sought. This process involves a refocusing from a more polarized "gun control" centric to a broader "gun misuse prevention" perspective. To accomplish this refocusing, an initial methodological step involves taking a figurative step back to gain a wider view of inappropriate gun use. This step appears to have allowed for the reframing of the gun misuse problem, and was greatly aided by the use of Cynefin theoretical considerations.

2. Exploring the Utility of a Change in Gun Misuse Terminology

A movement from the complicated to the complex region of the Cynefin model potentially provides an improved platform to analyze complicated issues. This theory-based orientation then provides a greater degree of clarity and depth of analysis when viewing gun misuse issues within the literature. This theoretical consideration also provides the basis for the paradigm shift from the term "gun control" to "gun misuse prevention." The thesis explored the validity of whether this framework helps to elucidate and clarify the issues surrounding gun misuse and its potential application to the development of best practices solutions.

Based upon this view, the thesis now moves on to present the results obtained from a literature review focused upon the need for collaboration and information sharing between the homeland security, legal and healthcare disciplines.

 Would the creation of an interdisciplinary perspective and the sharing of disciplinary information provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse?

G. EXPLORING THE POTENTIAL FOR INTERDISCIPLINARY COLLABORATION

Major gaps, hurdles, and roadblocks to addressing the issue of gun misuse become apparent upon reviewing the literature. A shifting of legislation seems to be occurring in the direction of weaker gun control regulation. In addition, the need legislatively to arm the public for its "self-defense" potentially may be viewed as a failure and inability of the government to protect the public, which may work to erode public trust in the government.

1. Presidential Directives Regarding Collaboration and Data Sharing

The literature review reveals that as a result of insurmountable legislative gridlock, on January 16, 2013, President Obama issued 23 executive orders calling upon federal agencies to improve their knowledge about firearm-related violence. The issuance of these executive orders was in response to on-going national gun-related tragedies that culminated at that time in the Sandy Hook Elementary School shooting incident.

The President called upon the public health system to address the causes and potential means for the prevention and minimization of the public health burden resulting from gun violence. The President also directed the CDC to resume its support of research directed at firearms-related violence, which appears to be a direct challenge to the earlier congressional ban on gun research conducted by the CDC. In addition, the presidential executive orders resulted in congressional policies that called for required background checks for all gun sales, a ban on armor-piercing bullets, the limiting of magazines to 10 rounds, and a stronger ban on assault weapons. The executive order additionally called for the funding of schools for the development of emergency response plans. It also included the need to fund and improve U.S. mental health coverage for potential

offenders and victims. The President also called for the development and implementation of approaches that ensured the collection and sharing of information between the agencies regarding gun violence.

2. Approaches to the Collection and Sharing of Disciplinary Information

A review of the literature seems to indicate that the sharing of disciplinary information in several potential areas may prove to be advantageous in addressing the issues surrounding gun misuse. For example, the DHS is progressive in that it offers active shooter preparedness training courses, materials, and workshops on its website. The "active shooter training" program is provided by way of FLETC. Training on CVE is also available. This training might serve as a potential starting point for the building of cross-disciplinary training and education programs based upon the collection and sharing of information between the agencies.

The DHS also has a wealth of information that addresses the balancing of various agency roles and responsibilities might play a role. Such forms of information sharing between the health care, homeland security, and legal disciplines would appear, upon a reading of the literature, potentially to provide cross-disciplinary benefits. The examination of other health care approaches not directly related to gun misuse, such as tobacco abuse, seatbelt use, obesity, and childhood poisoning seem to provide insights related to the construction of effective approaches to address the issues surrounding gun misuse.

Despite the potential for collaboration, a word of caution about interdisciplinary collaboration seems advisable. It must be kept in mind that differences do exist between the homeland security, legal, and healthcare disciplinary perspectives. It is well documented in the literature that intoxication with drugs and alcohol cannot be asserted as an affirmative defense to the commission of crimes in the legal system. These criminal acts often result in judicial punishments and legal sanctions. Legally, the individual is viewed as an "offender." At the same time, the literature supports the view that in the healthcare disciplinary arena, drug and alcohol abuse serves as the basis for treatment rather than punitive penalties. The individual is often viewed as a potential "victim"

seeking medical attention and care. It does not mean that these disciplines cannot work together when gun misuse instances involving substance abuse arise. However, it appears that it must be borne in mind as potential collaborative efforts are approached and developed.

What some see as adversaries when it comes to the issue of "gun control" may actually be able to collaborate when it comes to gun misuse prevention. For example, the NRA actually began as an organization that sought to fulfill the existing need for assuring gun safety and security for gun owners and the general public. The NRA membership includes many government officials and operatives. Perhaps, this represents a potential point for future collaboration with the NRA for assuring that safety and security goals involving gun misuse prevention are actualized. The thesis now turns to discuss the literature review results related to the use of fusion and counter-terrorism centers.

3. Gun Misuse: Fusion Centers and the National Counter Terrorism Center

Satellites, drones, and classified data leaks are sprinkled throughout the literature sources and media sound bites. It appears to erode public trust in government. Emergent fusion centers, even if well intentioned, are potentially perceived as yet another source of over-bearing governmental intrusion and attempts to control the public. Albert Einstein's post WWII warning, about keeping the instruments of war always in mind as having the potential to undermine the existence of domestic peace and tranquility, might find a place in this thesis as well. It appears that a high degree of governmental surveillance might unintentionally result in an imbalance between liberty and security with a resultant harm by trampling the unalienable rights of the public. Despite this view, these governmental surveillance systems may add a great deal of value in the provision of public safety and security, and thereby, preserve public rights. However, the literature also speaks to the need to establish the correct balance between liberty and security with regard to governmental surveillance.

4. Gun Misuse Information Sharing: The Health Insurance Portability and Accountability Act and the National Crime Information Center

The literature review reveals that President Obama issued 23 executive orders concerning gun violence calling for greater interagency collaboration and the sharing of information between agencies regarding gun violence. HHS and the CDC were called upon to share documentation that contained mental health information, protected by HIPAA, with law enforcement officials within the NICS. To overcome this obstacle presented by HIPAA, the OCR within HHS appears to have struck a balance between citizen privacy protections and the inappropriate sale of guns to those with mental illness.

From a reading of the literature, it appears that these high level executive decisions avoided dealing with costly legislative, legal, and bureaucratic roadblocks in establishing the requisite basis for interdisciplinary collaboration. In essence, it streamlined the ability to share information and set the stage for the creation of practical interdisciplinary collaborative approaches to address gun misuse. It appears to support the paradigm shift in terminology from "gun control" to "gun misuse prevention," and the need for interdisciplinary approaches to address gun misuse called for within this thesis. At the same time, it appears that Dahl's and Shipler's warning about the good intentions of government potentially going astray should not go unheeded. The literature appears to suggest that some form of litmus test that checks the balance between individual rights and liberty protections, and the concerns regarding public safety and security, is an absolute necessity. The thesis now turns to the topic of the need for public and private partnership to address gun misuse.

• Can public and private partnerships assist in addressing the occurrence of gun misuse-related injuries and deaths?

H. GUN MISUSE: PUBLIC AND PRIVATE PARTNERSHIPS AND THE USE OF TECHNOLOGY

Upon completing the literature review a question remains as to whether it would be enough simply to overcome the effects of the illegal gun market systems, polarized advocacy group initiatives, the lack of effective legislation, and criminal and terroristrelated activities? The literature review would tend to lean in the direction that even if many of these issues were to be completely eliminated, the main causes for gun misuserelated deaths each year would still go unanswered. That is, gun-related deaths due to suicide and accidental shootings. Technological approaches may provide a more timely solution in the interim to address the potential consequences of gun misuse-related deaths resulting from suicide, accidental shootings, and homicide.

The literature review reveals that private sector technological approaches to prevent gun misuse are already being explored and includes the use and development of on-line gun use and handling educational programs, RFID, smart guns and perimeter detection and containment systems.

1. On-line Gun Misuse Education

The literature review of both documents and on-line sites describe a myriad of on-line training programs and technological approaches that attempt to ensure gun use and handling safety and security. Review of the international literature notes that Canada has a background check and training requirement for the licensure of gun owners. A review of literature concerning seat belt safety brought attention to the Department of Motor Vehicles facilities that currently offer on-line training programs for those obtaining a driver's license. This structure might serve a useful purpose regarding the creation and use of an on-line program for addressing gun misuse prevention education. The thesis now turns to present what the literature reveals about attempts to modify guns as a means intended to provide for greater safe and secure gun handling and usage.

2. Smart Guns: Intrinsic, Technology-based Gun Modifications

The literature revealed that several "smart gun" technologies currently exist, such as mechanical mechanisms, external locking devices, key or combination locks, RFID, magnetic encoding, biometric systems (e.g., grip strength and fingerprint identification technologies), location awareness, and target recognition. The report continues to note that several technological limitations currently exist, which includes the inability of technological devices to identify the gun owner accurately and reliably, and the issue of rechargeable power sources for the technological devices.

3. The Private Use of Home or Workplace Radio Frequency Identification Devices or Geospatial Tracking Device-enabled Guns

After reviewing the literature, this thesis identified a gap that may be filled by the potential use of home-based monitoring approaches. The literature review yielded little information about how smart gun technology will be used from the perspective of maintaining the proper balance between liberty and security with respect gun owners, as well as the public.

4. Establishing Legal Gun Use and Gun-free Zones to Prevent Gun Misuse

The literature has abundant materials regarding fixed, passive gun detection systems commonly seen in the entryways to schools, airports, and government buildings. Additional literature appears to be emerging concerning the use of smart guns. The thesis literature review process noted a technology gap when it came to the potential use of RFID and GTD tagging with fixed zone systems for addressing the issue of gun use and handling safety and security. Also, the use of fixed system zones does not appear to have been applied to home and office settings upon review of the literature. The next section addresses the potential for GTD applications with respect to illegal gun use.

5. The Overt and Covert Use of Real-time Geospatial Tracking Devices to Elucidate and Delineate Illegal Gun Markets

A gap in the literature appears to exist with respect to the potential use of RFID and GTD use in both the overt and covert tracking of guns. This apparent gap in the literature is ignoring the potential for the tracking and identification of lost and stolen guns, as well as the delineation illegal gun market systems tied to criminal or terrorism enterprises. However, a potential obstacle to this approach is noted in the literature. In light of the failure of the unsuccessful and heavily criticized tracking of illegal marked guns in Mexico with "Operation Fast and Furious," such an approach may need to garner a significant amount of support to even be considered a viable option. The thesis now moves on to present what the literature review reveals about the use of high-powered air rifles and 3-D printable plastic guns.

6. Addressing the Use of 3-D Printed Resin and High-powered Air Guns

The literature review reveals that technological improvements with respect to the lethality and accuracy of high-powered air rifles and 3-D printed guns have been rapidly evolving, which has caused a great deal of concern for those within the homeland security, legal, and healthcare arenas. These items are apparently not classified as true "guns" in many states, and are even viewed as being toys by some, despite their ability to inflict lethal wounds. It is unclear if and to what degree current gun laws truly apply to these items if they are not recognized as true guns. In the next section, Chapter V, findings, conclusions, and recommendations to be drawn from this thesis with regard to answering the five thesis questions concerning gun misuse prevention are presented.

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V. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The following sections are a summation of the findings and conclusions drawn from the literature review and analysis process that was guided by the five research questions raised within this thesis. Recommendations are also presented concerning the issues of gun misuse based upon these research questions, the literature review, and the analysis process.

A significant literature review finding was that avoiding the temptation and tendency to reinvent the wheel is prudent from fiscal, resource and timeliness perspectives. To this point, several existing and effective policies, conceptual views, and tools should be combined and leveraged to address the issues surrounding gun misuse. Existing relationships within the homeland security, legal, and healthcare disciplines may require support not only for their continuation but transformation as gun misuse prevention approaches are developed.

• Do commonly held disciplinary, as well as public misperceptions and impediments exist to discourse regarding why, where, when, and with whom gun misuse-related injuries and deaths occur?

A. HOLDING ONTO MY AMERICAN GUN: HISTORICAL PERSPECTIVES ON GUN OWNERSHIP AND USE

Basing gun ownership and use solely upon historical precedents can be problematic. If these historical perspectives are too tightly adhered to, they can apparently result in not only polarized views but also of resistance to change and even complacency when confronted with issues involving gun ownership and misuse. More importantly, this inertia might result in inaction, with the potential for the eventual demise of public safety and security. Further, such stagnation turns a blind eye to the tragic consequences and social injustices surrounding the issue of gun misuse.

The government has a role to play in assuring the equal protection of citizens even in spite of complex controversies and polarized viewpoints surrounding gun ownership and use. The literature review revealed that the Forefathers of this nation were concerned about the public's abilities with respect to adequate and effective self-regulation.

Specifically, in this instance, can gun owners and the public be trusted to discern between safe practices and the reprehensible or dangerous with respect to gun use? In this regard, it appears that the literature tends to support the need for some form and degree of gun ownership governmental regulation. This perspective is also emboldened within the Second Amendment of the Constitution that calls for a well-regulated militia when it comes to gun ownership rights.

Proper gun ownership and use while addressing the prevention of gun misuse may be accomplished in several ways. These methods may include government legislation, improvements in existing and effective disciplinary approaches, and through the use of technological approaches that attempt to mitigate or "engineer-out" the existing threat of gun misuse.

A preliminary step recommended by this thesis is the use of a paradigm shift in terminology from that of "gun control" to "gun misuse prevention" to quench the flame of divisiveness surrounding the issue of gun misuse. Additionally, the misperceptions and impediments to discourse concerning the issue of gun misuse must be explored and contended with for progress to be made concerning potential solutions to this national problem.

B. MISPERCEPTIONS AND IMPEDIMENTS TO GUN MISUSE DISCOURSE

In the glow of deeply rooted personal and collective cultural perspectives and experiences, both pro and anti-gun supporters view the issues surrounding gun-related ownership, use, and misuse. In confronting these views, often polarized views, the legal system appears to have the dubious responsibility of attempting to balance gun owner rights protections with the potential for the tragic consequences resulting from gun misuse. The legal system is often turned to for "holy-grail solutions" that may or may not adequately meet the needs of addressing the consequences of gun misuse. Yet, based upon a review of the literature, this thesis takes the position that these legal system "solutions" should not be adopted at face value. Ample evidence shows that approaches, such as mass incarceration, punitive, and retributive justice, and even some well-

intentioned programs aimed at addressing youth violence, are in fact associated with iatrogenic harm (i.e., harm to the participant arising from the intervention itself). Often, the roots of misinformation, misperceptions, and impediments to rational discourse flourish in these settings.

This thesis recommends the discontinuation of ineffective and potentially harmful intervention approaches by the homeland security, legal, and healthcare disciplines. These programs continue to waste resources and have a potential to cause harm to the participants. Some of these programs have even been shown to support the emergence of greater anti-social behaviors. Perhaps, a focus placed upon the identification and support of existing and effective disciplinary and interdisciplinary approaches to gun misuse with a restorative justice orientation would be a prudent place to start. In this regard, the results of the thesis literature review process lead to findings concerning some perceived misperceptions and impediments to discourse. What follows are the conclusions drawn with recommendations for addressing these concerns.

1. The Legal and Illegal Gun Market Systems

Guns are sold through regulated legal (legitimate), as well as illegal (illegitimate) straw, gray, and black-market systems. Yet, scrutiny does not always appear to extend to the purchaser at the point of sale in legal, as well as illegal gun markets. The existence of poorly regulated gun markets has been the bane of many legal system and government operatives. It is important to note that their views may also be shared and supported by gun owners as well. However, the polarization created by both pro and anti-gun advocacy groups may act unknowingly to shield those involved in gun misuse and illegal gun markets by preventing governmental and law enforcement attempts to address and prevent gun misuse. This thesis posits that the protective shielding effect may actually be initiated, fueled, and sustained by media streams that support and strengthen the existence of the underlying advocacy group polarization around gun misuse. Thereby, the media unintentionally adds to the protection of those involved in gun misuse, as well as illegal, and poorly regulated legal, gun market systems. As a recommendation of this thesis, it appears that more attention, as well as research, should be initiated and directed at

addressing this concern. A change in terminology to gun misuse prevention may assist in dampening the polarization, and thereby, facilitate discourse. An additional need may exist to create a strong counter-narrative and to take action when addressing these illegal gun markets. These considerations are discussed further in the next section of this thesis.

2. A Balancing Act: The Constitution, Declaration of Independence, and Gun Misuse

Pro-gun supporters often assert the view that the Second and Fourth Amendments serve as shields against the infringement of their rights to gun ownership and use, as well as the potential confiscation of their guns. This assertion includes what they view as potential gun confiscation even by governmental authorities. At the same time, some of the more ardent anti-gun advocates state that guns should be entirely eliminated from society. This viewpoint further fuels the pro-gun sentiments that some wish to take away their guns. The correct balance must be struck between liberty and security with respect to gun ownership. The Constitution and a document commonly referred to as "The Declaration of Independence," seem to provide some insights and potential guidance during the literature review and synthesis process in this regard.

The right to bear arms of one citizen against another during the Civil War between the states actually posed a direct threat to the existence of this nation. An interesting correlation can be made concerning gun misuse that goes unaddressed in which a gun is used, one member of the public against another. It is interesting that in the founding document of this nation, the Declaration of Independence, unalienable rights included life, liberty, and the pursuit of happiness. Although the exact number and nature of these rights was not fully addressed due to the use of the terminology, "...among these unalienable rights are," gun ownership was not specifically mentioned. A further review of the literature seems to support the notion that guns might have been viewed as protection against threats posed by an external foreign government. Guns might then be viewed as a means to secure and preserve the rights to life, liberty, and the pursuit of happiness. It appears that the later addition of the Fourteenth Amendment Equal Protection Clause may underscore this viewpoint if viewed as an attempt to quell the potential for internal conflicts between members of the in-group public. It would appear

to lean in the direction of the original intent of the Declaration of Independence. It also seems to support conceptually the position taken within this thesis that life, liberty, and the pursuit of happiness often perish in the smoke of gun misuse aftermaths. The winds of current, often media driven, propaganda and sensationalism regarding gun misuse tends to skew public opinion in a direction of polarized views. Such polarization creates an atmosphere of dissention and opposition amongst those contending with the issue of potential stricter gun ownership regulation. Albert Einstein reflected upon this shortly after WWII, noting that domestic peace and tranquility were not attainable by a people who always kept the vestments of war in mind.

Upon a review of the literature, it appears wise to keep in mind what Dahl has to say about this issue. Dahl noted that the restoration of the fundamental balance between liberty and security has been delayed after the 9/11 attacks, leaning in the direction of increased governmental power. It appears that it is not that either liberty or security are unimportant, but that they must both be properly balanced for domestic tranquility to exist and flourish. Yet, when an imbalance exists that leans in the direction of greater safety and security, liberty may be the ultimate victim. The very opposite appears to be true as well. The growing polarization and unwillingness to compromise in the gun debate appears to be forestalling what Dahl noted is the rebalancing of liberty and security after 9/11. When viewing the issues surrounding gun misuse, the undercurrents arising from the guiding principles of the Declaration of Independence and the Constitution regarding the proper balance of liberty with safety and security are inescapable.

This thesis recommends the establishment and use of educational programs centered upon the Constitution and the Declaration of Independence both in schools and for the general public. These programs appear to be grossly lacking in current educational curriculums according to the literature reviewed. These views seem to be important to consider when devising fusion center, shot-spotter systems, and other governmental approaches to address gun misuse with a public that is uninformed about basic rights and protections.

Another potential source serving as an impediment to discourse concerning gun misuse is the role the media plays regarding views on gun ownership, use, and misuse.

3. Gun Use and the Media

The media has played a historical and deeply rooted role in how guns are perceived by the public. To some extent, it appears to include homeland security, law enforcement, and legal and healthcare disciplinarians as well. The media may vilify both criminals, as well as those that swore to uphold the law and protect the public, and yet, in the twinkling of an eye, glorify these same individuals as well. It may tend to leave the public baffled when it comes to their feelings towards these individuals who are both gloried and crucified within the media streams. The implications this finding might have during the recruitment efforts of gangs, criminal enterprises, and terrorist organizations might deserve further exploration as well. In fact, Al Qaeda currently uses video propaganda materials to recruit and train its members. Evidence demonstrates that the lessons learned from observing how this nation's media covers issues related to the use of weapons, such as guns, may have aided terrorist organizations in the designing of their propagandized videos and recruiting documents. The media has also had a very positive role to play in its coverage of such historical events as the civil rights movement. Potentially, the media may present strongly stated counter-narratives directed against gun misuse as well.

This thesis recommends that the media and homeland security, legal and healthcare disciplines convene to have an open dialogue concerning how they can work together to address the need for gun misuse prevention. That is, while the disciplines are cognizant of the First Amendment right to the freedom of speech and the media realizes the critically important role it plays in supporting the correct balancing of liberty with safety and security.

4. A Governmental Ban on Gun Misuse Research

A Congressional ban placed on gun-related research conducted by the CDC was noted to be a necessary step. Congress perceived this research to be a politically motivated attempt by the CDC to control the public ownership and use of guns. The

literature review finds that some conflicting judicial opinions were stated regarding the approach taken by Congress. Nonetheless, the effect was the creation of an impediment with an associated chilling effect on further discourse both within the public domain, as well as within the scientific research community. It also appears that pro-gun advocacy groups and organizations lobbied and helped to bring this scientific ban into fruition.

This thesis recommends that a stronger public-private relationship be developed that is respectful of the views and positions on both sides of the gun ownership and use debate. The actual origins of polarization exist in the private and public sectors outside of the government. Common ground might be found by addressing the issue of inappropriate gun use through the lens of gun misuse prevention suggested with this thesis. Perhaps, with a clear understanding of the consequences of gun misuse, such as the accidental shooting of children, as well as intentional gun-related suicides, consensus can be reached despite strong polarization. Of note, the literature review reveals that the NRA actually began as an organization directed at the assurance of safety and security of its members when handling and firing their guns. Perhaps, this organization can help to lay a foundation for such discussions by reemphasizing its original intent as an organization.

5. Approaches to Gun Misuse and Disciplinary Conflation

Upon reviewing the literature, an interdisciplinary conflation of overlapping roles and responsibilities appear to exist when confronting gun misuse aftermaths. A great deal of similarity also occurs in the way the homeland security, law enforcement, and healthcare vision and mission statements are constructed and conceptualized with respect to protecting the public. Nevertheless, differences also appear with respect to the cultures and perspectives these disciplines embody. The DHS has striven in some areas to create an atmosphere of collaboration. This thesis recommends that more research is needed with respect to what made some of these efforts at collaboration succeed while others failed. Such an endeavor must be accomplished with a fast forward failure frame of reference in mind that does not assuage blame during the process. See Appendix F.

It appears that a word of caution about this approach is also noteworthy. The operational boundaries and reporting authority structures must be well structured and comprehended by those participating in the process. The formation of sub-groups that tend to ignore the directives of the agencies they report to can be problematic at best. Some assistance in addressing these issues may potentially be provided within the ICS, the NIMS and NRF guidelines. In addition, some sources regarding organizational design and theories concerning human resources management are summarized in Appendix F. The thesis now turns to insights and conclusions arising from a review of the literature concerning nationalism.

6. Nationalism: A Potential Impediment to Gun Misuse Discourse

A comparative literature search was completed to discern whether potential lessons can be learned from the approaches taken within other nations to address gun misuse. The literature search was limited to other industrialized nations that may face similar issue as the United States. The countries included in the literature review were Canada, the United Kingdom, and Australia. Of the countries selected, the United Kingdom had the most restrictive gun laws that prohibit gun ownership by members of the public. The United States had the least restrictive gun laws and the most guns per capita of the countries studied. Of the countries included in the literature review, Canada appeared to have a system reasonably similar to the United States. Canada allows gun ownership but both gun registration and required gun use training are required for licensure unlike the United States. Of the industrialized nations studied, the United States also was noted to have the highest number of guns owned per capita and the highest gunrelated death rates for suicide and homicide.

This review would seem to at least bring into question pro-gun sentiments that the presence of more guns would necessarily translate into a higher degree of public safety and security. Further research appears to be needed to determine whether a cause and effect relationship between the total number of guns present and the total number of homicides and suicides occurring actually exists.

In another international polling study concerning the need for greater gun regulation, the one consistent demographic across the United States, the United Kingdom, and Canada was gender. Women were much more likely than men to support stricter gun control laws and regulations even within the United States. Perhaps, the relative gender imbalance in the legislature if more properly balanced and representative of the demographics of the public were to be realized, the issues surrounding gun misuse prevention might receive more attention and support.

A review of the literature suggests that nationalism could tend to impede the discourse between nations concerning gun misuse prevention. For example, it might be an insurmountable obstacle for some to accept the imposition of a complete gun ban upon the public. It may not allow them to see any of the benefits of the legislation that surrounds the imposition of this ban or policing actions that may be of benefit if adopted and applied within the United States. Canada, which has laws more similar to the United States than those within the United Kingdom, may be more important to have a dialogue with regarding gun misuse.

Canada does have gun registration and training requirements, as well as an assault rifle ban that is qualitatively different from the United States, but it is much less qualitatively significant than the complete gun ban that occurred in the United Kingdom. Yet, both the homicide and suicide rate in Canada are a fraction of what they are in the United States despite the presence of a large number of guns in both countries. More research needs to be conducted to determine if this rate is evidence of effective gun registration and training policies including the assault weapons ban or due to some other culturally-based or idiosyncratic factor(s) deserving closer attention. On a practical level, an array of disciplines perceives, defines, and interprets gun misuse from its unique disciplinary perspectives.

• How do the homeland security, legal, and healthcare disciplines perceive, define, interpret, and approach the issues surrounding gun misuse-related injuries and deaths?

C. GUN MISUSE AS A HEALTHCARE DISCIPLINARY ISSUE

The literature review discloses some of the gun misuse consequences with which the healthcare system must continuously contend. Healthcare disciplinarians are charged with the attempt to minimize the degree of disability and deaths stemming from the misuse of guns on a daily basis. In addition to addressing the gunshot victim's wounds, the mental health and social ramifications of those family and community members closely involved with the victim must be addressed as well.

Also, those involved in violent acts may tend to return for repeated episodes of gun violence should they survive the previous encounters. The thesis now turns to discuss the results from the literature review process beginning with an examination of gun misuse-related injury and death rates.

1. Gun Misuse-related Injury and Death Rates

A review of the literature reveals that the homicide rate in Chicago for the year 2014 was 432, which is compared to homicide rates of 828 in 1995, 633 in 2000, and even 498 in the year 1928. Some may feel that since the homicide rate is apparently on a decline nationally that less cause for concern about such issues should ensue. However, the homicide rate does not take into account the aggravated assault rate. In addition, from a healthcare perspective, the very presence of a vast number of guns in society is analogous to a "floating iceberg model" in which the agents of injury and harm lay dormant beneath the surface of expression until an outbreak of gun violence occurs. In addition, these instances of gun misuse expression are generally only superficially addressed. A deeper exploration and attempt to correct the underlying systemic circumstances leading to the occurrence of gun misuse typically does not occur.

A healthcare disciplinary duty is to protect each member of the public as happens with homeland security and law enforcement efforts. To explore the potential for collaboration between these disciplines, this thesis recommends the creation of a common interdisciplinary vision concerning the issue of gun misuse prevention. The disciplines must be educated about the actual leading causes of gun-related deaths, which are suicide, not homicide, as apparently it is commonly believed. The creation of an open

dialogue between these disciplines concerning the issues of suicide and accidental shootings should be explored as well. The thesis now moves on to discuss the impact of gun misuse on healthcare institutions.

2. The Impact of Gun Misuse on Healthcare Resources

Gun violence occurs in hospital emergency departments and parking lots. The literature revealed that hospital employees are four times more likely than other private sector workers to be the victims of assault. Despite the posting of no gun allowed signs permitted by legislation, the literature reveals the lack of consistent planning and training of hospital employees regarding how to respond to the presence of a gun or gun related shooting. The literature indicates that laws prohibiting the carrying of a legally owned and concealed gun into the hospital environment do not exist in most states. Healthcare workers are not even trained on what to do if they discover a visitor has a gun. For instance, do they ignore its presence, report it, or attempt to confiscate it as a lawful possession to be stored or as a piece of potential evidence for a criminal or terrorism-related legal proceeding?

The number of available trauma centers is apparently inadequate according to the literature, especially in impoverished areas where access to a trauma center is more likely to be needed due to a higher level of gun violence. Nevertheless, it appears that the average gunshot victim places enormous strains on the fiscal operations of the hospitals choosing to maintain a Level I trauma center. Yet, the unwillingness of a hospital to provide trauma center services can work to erode public trust in the hospital.

The thesis recommends a closer working relationship between the healthcare workers and homeland security, as well as law enforcement to discern and assist the healthcare workers with the development of potential solutions for some of the issues raised in this thesis. The challenges that guns present for healthcare settings seem to call for greater legal and homeland security, as well as legislative input and support. That is, before patients or visitors arrive with guns at a hospital, clinic, or private medical office. It appears to be a commonly held public duty of the government to protect patients, visitors, and healthcare providers. Placing a focus on this issue of healthcare workplace

safety and security represents a potential viable point for collaboration between the healthcare, legal, and homeland security disciplines. The homeland security and legal disciplines can offer a great deal of assistance to the healthcare discipline in meeting such a challenge. It may also set the stage for interdisciplinary collaboration on other issues, such as the intersection of gun misuse with issues concerning mental health, suicide, and drug and alcohol addiction, particularly where gun misuse is involved.

3. Suicide: Standing in the Shadows of Taboo and Homicide

It is a widely held misperception that homicide is the main cause for gun-related deaths, when in fact on a yearly basis almost two-thirds of all gun-related deaths are actually due to suicide. In addition, a significant number are due to accidental shootings as well. This thesis suggests a potential explanation for the occurrence of this misperception. Such a misperception may arise from two potential sources. This first is the cultural taboo against discussing the issue of suicide. The second involves exposure to media driven images and narratives, both of historical, as well as sensationalism-based origins. The "what bleeds, leads" phenomenon of choosing what to air on televised news is often presented without proper context. When historical distortions, sensationalism, and propaganda are combined concerning instances of gun misuse, it tends to place a shadow and blind eye upon the major cause for gun-related deaths, suicide. This thesis recommends that an educational campaign to dispel these misperceptions and impediments to discourse concerning suicide be developed. That is not only for the education of the public, but also for the homeland security, law enforcement and healthcare disciplinarians as well.

4. Behavioral Modification Approaches to Gun Misuse

The gravity of the responsibility in both the securing and operation of their firearms in a safe and secure manner would presumably be of paramount importance for law abiding gun owners. It would presumably include prohibiting access to their guns where the potential for alcohol and drug abuse, as well as suicide exists. Nevertheless, at its core, gun misuse arises from maladaptive behaviors of those handling and discharging a gun.

Multiple social theories address potential behavior-based linkages to gun misuse. What appears to be a seminal literary resource concerning the issue of approaches to behavior-based approaches to prevent gun-related misuse is a 2001 document entitled "Youth Violence: A Report of the Surgeon General." This document reviews and categorizes programs by their intervention level (i.e., primary, secondary, or tertiary), and degree of effectiveness (i.e., model, promising, and does not work). The positions stated in the report were the result of the data provided by multiple meta-analysis studies performed at leading institutions from around the country.

It appears that some of the programs mentioned that were proven to be ineffective, and even potentially harmful to the participants, are still operational to this day, which is more than a decade and a half after the publishing of this report. This thesis recommends that the information in this study be applied immediately and that ineffective and potential harmful intervention programs be discontinued. In addition, the resources should be redistributed to highly effective programs and a report prepared to educate the homeland security, legal, and healthcare disciplines regarding the findings related to the overdue implementation status of these recommendations. The thesis now turns to gun misuse as a legal system disciplinary issue.

D. GUN MISUSE AS A LEGAL SYSTEM DISCIPLINARY ISSUE

Law enforcement officers, as well as the court systems, routinely confront the issues surrounding gun misuse-related injuries and deaths. The legal system often operates within communities where poor education, inappropriate behavioral choices, and gun misuse appear to serve as preludes to the development of dire social consequences, as well as poor health outcomes. In addition to facing the often complex and complicated issues involved in gun misuse, the community landscape may also serve as a harbinger for criminal and terrorism related activities.

The legal system must endeavor by necessity to develop relationships with the community members that support its goals centered on justice related to ensuring public safety and security. Nonetheless, the mechanisms and to what degree various public

needs are ultimately being met by the legal system with respect to instances of gun misuse are often obscure.

The ideological viewpoints and realities of previously remote and isolated rural, as well as inner city urban communities, also admix upon the national legal system stage. It has the potential for creating positive, as well as negative, impacts on these communities, as well as the law enforcement officials themselves. It also results in jurisdictional disarrays and cross-disciplinary conflict within the legal system with respect to their roles and responsibilities regarding gun misuse. In addition, the ability of law enforcement operatives to adapt continuously to such a variable and complex landscape of gun misuse behaviors and cultural perspectives appears to be challenging at best.

Despite areas of jurisdictional overlap, the various components of the legal system must ultimately be consistent with respect to the laws they uphold. This thesis suggests that a great deal of potential benefit can be derived from interagency collaboration to begin to address gun misuse adequately.

1. Crime and Public Safety

Despite inherent social complexities, as well as individual and sub-group differences, gun misuse safety and security concerns seem to be commonly held by the members of the general public. It is also becoming clearer that the ability to prevent, as well as respond to the threat of gun misuse, is becoming of paramount importance. The literature reveals the yearly number of gun-related homicides pales in comparison to the number of deaths related to suicide. It is also apparently essential to carefully weigh the components of gun misuse approaches against the constitutional protection of individual rights for gun possession and ownership. The proper balancing of gun owner and gun misuse victim rights also appears to be required. To accomplish this balancing, a concerted effort to avoid the amplification of existing, emotion-based pro and anti-gun polarization is essential.

This thesis recommends the creation of an interdisciplinary approach that refocuses attention to the prevention of accidental shootings and potential suicides. The

public, by necessity, would have to be involved in this process for it to succeed and garner public acceptance for the approach. It may then also strategically lay the groundwork to address the gun misuse issues related to homicide as well. Without efforts directed at gun misuse prevention, incarceration becomes the response to gun misuse by default.

2. Addressing Gun Misuse through Incarceration

Unsafe situational environments, as well as inappropriate behavioral choices made by gun users, all too often appear to result in deleterious and tragic social and health-related outcomes. A societal response to gun misuse has taken the form of building prisons to house "offenders" and those "too dangerous" for a continued societal presence. The literature review and analysis revealed that the incarceration approach taken is illogical, to a large extent invalid and ultimately, non-sustainable.

This thesis holds that interdisciplinary collaboration involving community engagement approaches with a behavioral focus, especially for minor offenses, may help to prevent the need for mass incarceration. It would seem to be more logical and in alignment with the prevention-based, curative healthcare perspective. It must be cautioned, however, that at times a curative approach may be deemed inappropriate by the legal and homeland security disciplines; for example, with capital crimes involving defenseless children or mass shooting situations. The thesis now turns to the intersection of criminal and terrorism-related activities involving gun misuse.

3. The Gun Misuse Nexus with Gangs, Smuggling, and Terrorism

It is not surprising that gun-related homicides and illegal gun sales arise because criminals, gang members, and terrorists do not appear to respect or feel obliged to follow existing policy positions and laws. That is, of course, until the offender is being arrested and then uses existing laws, as well as constitutional rights protections for their personal defense when brought to justice. In addition, the literature reveals that the individual at the trigger of and firing a gun is either vilified or glorified depending upon the context in which the gun is being used. Gun-wielding gangsters, smugglers, and thieves are often portrayed in movies. These iconic criminals are often viewed as movie stars and idolized

by members of the public. Even the horrendous acts perpetrated by gun-wielding terrorists have their clandestine audiences. It appears that when formulating approaches to address gun misuse within these groups, such in-group perspectives would have to be taken into account.

The thesis literature review revealed that some gaps still exist in exactly how these armed individuals and groups perceive themselves and actually operate. The thesis recommends the creation of interdisciplinary approaches to discuss this issue further. Perhaps as a starting point, it may take the form of a working consensus group with the objective of creating a white paper concerning this issue from an interdisciplinary perspective. The groundwork can build on new or existing governmental legislation or mandates.

4. Presidential Executive Orders and Congressional Acts

A review and understanding of the FAWB, NFA, the Cleary Act, and the Brady Bill legislation is essential for a further discussions regarding gun misuse. These documents are not only a collection of opinions but also contain academically based gun misuse research data and conclusions from a broad spectrum of disciplinary experts. It also includes the testimonies and perspectives of homeland security, law enforcement, and healthcare officials and advocacy group representatives attempting to contend with the national issue of gun misuse. It may represent, on the executive and legislative levels, the de facto creation of the type of collaborative structure called for by this thesis. This thesis recommends further research on how it evolved, as it may shed further light on how interdisciplinary approaches should be organized, developed, and supported.

a. Too Dangerous for Public Use: Switchblades and Brass Knuckles

Switchblade and brass knuckles use and possession still remain outlawed on all federal and tribal lands, as well as in many states. However, within the same congressional act, Congress recently failed to ban AK 47 assault rifles as being too dangerous for public use. The question for legislators, as well as the American public, remains. Is not an automatic assault rifle more inherently dangerous than an automatic switchblade or a set of brass knuckles? Yet, despite running the legal gauntlet of

constitutional challenges, as occurred for banned automatic knives and brass knuckles, the proposed ban on assault rifles in the United States has not prevailed to date.

This thesis recommends a reexamination of these laws and a more focused and rational approach to addressing the issue of the use of automatic assault rifles. It may, however, be a long and tumultuous battle for those wishing to pursue this course of attempting to ban assault rifles. Nevertheless, some lessons may be learned from Canada as to just how such a task was achieved.

b. Exploring the Utility of a Change in Gun Misuse Terminology

A change in gun misuse terminology allowed the movement of the issues surrounding the inappropriate use of guns from the complex to the complicated region of the Cynefin model. It appears to have provided an ideal platform to clarify the issues surrounding gun misuse to a greater degree, and thereby, provide a greater degree of clarity and depth of analysis of gun misuse issues as viewed through the literature. This theoretical consideration also provided the basis for the additional paradigm shift from the term "gun misuse' to 'gun misuse prevention."

The thesis recommends the use of this framework that helped to elucidate and clarify the issues surrounding various homeland security, legal, and healthcare approaches to gun misuse prevention. By allowing this usage to occur, it also paved the way for the potential development of best interdisciplinary practice approaches to support the goal of gun misuse prevention. In addition, the widened perspective it provided regarding gun misuse prevention allowed for the refocusing of attention to the predominant cause of gun-related deaths, which is suicide. This approach to terminology may have potential applicability to other issues of common interest to the homeland security, legal, and healthcare disciplines.

5. Emphasis on Criminal Prevention and Intervention

A direct and significant overlap appears to occur between the homeland security, legal, and healthcare disciplines with respect to both theoretical and practical considerations regarding gun misuse-related behaviors. An abundance of literature

surrounding attempts to prevent an individual's progression into criminal or terrorism-related behaviors and activities is available for review. In fact, the literature review performed within this thesis revealed that attempts to eliminate the potential for an individual's progression into criminal and destructive, subversive group membership, and activities can be a daunting task at best. Nonetheless, seminal literary works underscore the need to pay attention to the emergence of such behaviors in members of the public.

In particular, the 2001 Surgeon General's report was especially important to addressing gun misuse behaviors. Despite its release over a decade ago, it appears the warnings concerning the ineffectiveness and potential harms imparted by some behavioral approaches have gone unheeded and are still practiced. This thesis recommends a reexamination of the content of this document, and that proactive steps be taken to implement its recommendations. Even this thesis must avoid the temptation to reinvent the wheel by supplanting these recommendations with its own in this regard. This thesis now turns to gun misuse-related issues from the perspective of social justice and public resiliency.

E. GUN MISUSE PREVENTION AS A SOCIAL JUSTICE AND PUBLIC RESILIENCY ISSUE

Many societal factors underlie gun misuse. Many of these factors involve the concepts of social justice regarding such issues as societal acceptance of individuals and access to education, adequate nutrition, and employment. It even includes the terminology used to classify a person as a perpetrator or victim.

1. The Intersection of Gun Misuse with Poverty, Education, and Social Equity

Emergent social disorder appears to have a relationship with the relative degree of infrastructural inadequacies unable to meet public and individual needs and demands. These instances are often recognized and referred to as disparate impacts within the literature. The thesis explored the literature to gain an understanding of how such circumstances may be linked to the misuse of guns and its harmful consequences. The thesis contends that, if unable to adapt to a changing environment, this phenomenon

appears to leave behind in its wake those who are more vulnerable, mistrusting, and incapable of continued societal participation. Those with mental health issues could conceivably be more dramatically impacted by such circumstances. The literature review and analysis performed reveals a significant overlap of the occurrence of gun misuse and such subpopulations. The thesis concludes that often the polarized disciplinary terminology used, which is often based upon misperceptions and impediments to discourse, to approach gun misuse aftermaths may actually be shifting complicated matters it a more complex arena. An interdisciplinary approach where the definitions utilized by the various disciplines are more clearly defined and codified appears to be needed. It would be done not only for improved communication but also to avoid making the situation more complex.

2. The Dilemma of Defining the "Perpetrator" and the "Victim"

In general, the perpetrator of an intended crime is viewed as unlawful and the victim as the one who bares the negative consequences of the perpetrator's actions. Such a view appears to be supported, for instance, with an overt criminal act in which a defenseless member of the public is shot and killed by a bank robber. Despite this view, it appears that the distinction between the perpetrator of a crime and the one viewed as victim might become obscured during the application of both policy and enforcement actions. For example, the burglar that sues the homeowner after slipping down broken stairway steps or after falling "victim" to a homeowner created booby trap. From the gun misuse prevention standpoint, such a distinction between perpetrator and victim can become even less discernable.

The implications of labeling an individual as either a "victim" or a "perpetrator" appear to have significant and often dire consequences. The homeland security and legal disciplines appear to attempt to create clear distinctions between the roles of the perpetrator and the victim. The basis for having to classify any given individual, or group of individuals, as "perpetrator" and "victim" definitively may stem from the homeland security and law enforcement officers having sometimes to make split second decisions during the actual unfolding of responses to gun misuse. This form of misclassification

may carry over into other perspectives and perceptions held by these safety and security officers. This polarized view of victim versus perpetrator can be problematic when approaching issues that require a greater degree of discernment of the nature of a particular gun misuse situation. This thesis recommends more research on how to address this critical issue. Interdisciplinary teams should be organized for this very purpose, as an initial step to address these issues and active interdisciplinary participation and clearly define the terms "victim" and "perpetrator." In addition, research and operational programs involved in restorative justice attempts should receive further fiscal and institutional support, which calls for the creation of new interdisciplinary perspectives.

• Would a paradigm shift in terminology to gun misuse prevention lead to a better understanding of the factors that tend to shape inappropriate, as well as appropriate disciplinary approaches to gun misuse?

F. THE UTILITY OF A PARADIGM SHIFT IN GUN MISUSE TERMINOLOGY

At first glance, the issue of "gun control" may appear to exist in the realms of the complicated or even chaotic (Cynefin), "global problematique" (Ozbekhan), or "wicked problem" (Churchman). See Appendix F for further information on these theories and perspectives.

1. Gun Misuse Terminology: A Shift from the Complex to the Complicated

This thesis presents a lens through which a wider view of discipline-based approaches to gun misuse is sought. This process involves a refocusing from a more polarized "gun control" centric to a more expansive "gun misuse prevention" perspective. To accomplish this refocusing, an initial methodological step involves taking a figurative step back to gain a wider view of inappropriate gun use. This step appears to have allowed for the reframing of the gun misuse problem. This step was greatly aided by the use of Cynefin theoretical considerations. In fact, the answer to this question assumes that the reliance upon a paradigm shift in gun use terminology along with Cynefin theoretical considerations in fact is able to allow for a deeper analysis of the literature. It involves a quantitatively based literature review research approach.

2. Exploring the Utility of a Change in Gun Misuse Terminology

The paradigm shift from the term "gun control" to "gun misuse prevention" allows for a movement from the complex to the complicated region of the Cynefin model. It provides a platform to clarify and analyze complicated issues to a greater degree, which is then utilized to view gun misuse issues quantitatively within the literature. Through the use of this process, an improved degree of clarity and depth of analysis may yield best practices solutions for the issues surrounding gun misuse. The thesis explored the validity of whether this framework helps to elucidate and clarify the issues surrounding gun misuse and its potential application to the development of best practices solutions. An additional step was the identification of misperceptions and impediments to discourse that might interfere with the formation of an accurate view of gun misuse and its causative factors. This step included the clarification of interdisciplinary roles and relationships.

It remains to be seen if a change in terminology provides for improved clarity and depth of analysis that results in improved interdisciplinary collaboration and development of best practices solutions is validated. It also sets the groundwork for this approach to be applied to other issues of common interdisciplinary interest. The thesis now moves on to present insights, conclusions, and recommendations regarding the need for the creation of an interdisciplinary perspective and sharing of information.

• Would the creation of an interdisciplinary perspective and the sharing of disciplinary information provide a benefit by supporting appropriate and avoiding inappropriate approaches to gun misuse?

G. EXPLORING THE POTENTIAL FOR INTERDISCIPLINARY COLLABORATION

It is apparent upon reading the literature that major gaps, hurdles and roadblocks exist when it comes to addressing the issue of gun misuse on the legislative level.

1. Presidential Directives Regarding Collaboration and Data Sharing

A shifting of legislation in the direction of weaker gun regulation appears to be occurring. However, the need legislatively to arm the public for their "self-defense" may

also potentially be viewed as a failure and inability of the government to protect the public. It may work to erode the trust relationship between the general "at-risk" public and the government.

It appears that as a result of insurmountable legislative gridlock, on January 16, 2013, President Obama issued 23 executive orders calling upon federal agencies to improve their knowledge about firearm-related violence. This issuance was in response to on-going national gun-related tragedies that culminated at that time in the Sandy Hook Elementary School shooting. The president called upon the public health system to address the causes and potential means for the prevention and minimization of the public health burden resulting from gun violence. The president also directed the CDC to resume its support of research directed at firearms-related violence, which challenged the earlier congressional ban on gun research by the CDC. In addition, the presidential executive orders resulted in congressional policies that called for required background checks for all gun sales, a ban on armor-piercing bullets, the limiting of magazines to 10 rounds, and a stronger ban on assault weapons. The executive order additionally called for the funding of schools for the development of emergency response plans. It also included the need to fund and improve U.S. mental health coverage for potential offenders and victims.

This thesis recommends that the spirit of these 23 executive orders be capitalized upon by the development of homeland security, legal, and healthcare interdisciplinary collaborative efforts supporting the president's intent to address gun-related deaths. Further, proactive steps should be taken to ensure that the sharing of information occurs.

2. Approaches to the Collection and Sharing of Disciplinary Information

The sharing of disciplinary information may prove advantageous in several potential areas. For example, the DHS is progressive in that it offers active shooter preparedness training courses, materials, and workshops on its website. The "active shooter training" program is provided via FLETC. Training in CVE is also available. This training might serve as a potential starting point for the building of cross-disciplinary training and education programs concerning the proper use and handling of

guns, as well as misuse avoidance. Perhaps, the groundwork and lessons learned to date within the DHS that address the balancing of various agency roles and responsibilities can also play a role. Interdisciplinary collaboration may serve to generate the "ammunition" for incremental legislative steps towards realizing the goals of gun misuse prevention.

Lowenthal questions whether secrecy and clandestine activities are always required to have a desired outcome in the intelligence arena. This viewpoint would seem to pave the way for the greater sharing of interdisciplinary information. It seems to challenge the need to classify and silo information to such a degree that makes it inaccessible to those with a need to know. Several recent presidential directives also call for a greater degree of interdisciplinary data and information sharing, as well as collaboration. This approach would appear to lend support the creation of effective interdisciplinary prevention-based approaches to address gun misuse. Interdisciplinary boundaries seem to solidify and intensify as the degree of risk for severe threat-based consequences increases. This increase appears to be associated with polarization around the core views and values within each discipline. Each discipline appears to become more in-group centered and focused. It is especially true within the aftermath of gun misuse during cross-disciplinary response activities. The point is that these interdisciplinary boundaries would presumably be less formidable in the setting of gun misuse prevention.

A focus on gun misuse information sharing also underscores the need for greater interdisciplinary collaboration with a deepened sense of understanding and cooperation. Despite these views on interdisciplinary information sharing, a concerted effort must be made to collect only the information necessary to address the gun misuse issues at hand.³¹¹ This process must still have as a fundamental tenet the proper and strict security, privacy, access to, and use of all public and private information and data collected at all times.³¹² Appropriate sanctions must be established and strictly enforced with respect to

³¹⁰ Mark M. Lowenthal, *Intelligence: From Secrets to Policy*, 4th ed. (Washington, DC: CQ Press, 2009): 279–296.

³¹¹ Louis R. Mizell, *Invasion of Privacy* (New York: Berkley Books, 1998).

³¹² Martine C. Menard, "Privacy Protection through Security," *Privacy Protection for E-Services* 2006, 115–40.

anyone choosing to violate existing constitutional and legal safeguards. A review of the privacy policy issues and considerations faced by fusion centers, as reflected in the GJISI document, may offer some guidance in this regard.³¹³ These safeguards were put in place to support, protect, and ensure fundamental public rights, liberties and freedoms.

This thesis suggests that the potential exists for the creation of a gun misuse prevention interdisciplinary department. The goal would be the creation of a place where the various gun misuse-related data, disciplinary practices, and lessons learned could be integrated within a unified cross-disciplinary departmental entity. By establishing such a department, it might be possible for a cross-disciplinary vision, mission, and perspective concerning gun misuse to emerge. It might serve to eliminate barriers to information sharing directly and avoid the necessity for having to reinvent the wheel. The admixture of these existing disciplinary approaches with tacit and explicit information and data might also serve to foster the generation of new knowledge concerning gun misuse.³¹⁴ Gaps in gun misuse approaches might then also be more easily identified through the application of existing and new knowledge.

The formation of an independent, cross-disciplinary gun misuse prevention department would conform to the CDC request that law enforcement, homeland security, and public health data sharing occur to address approach gaps, but in a deeper and more structured way. This formation has implications not only regarding the blending and restructuring of the approaches to gun misuse itself but also for how the various disciplines are currently structured. For example, healthcare providers helping to develop prevention approaches to address alcohol abuse and gun misuse might gain perspectives from the law enforcement operatives, but now as "team members." As a result of this sharing, alcoholism, suicidal ideations, and mental illness might be more clearly understood from a healthcare perspective by officers helping to formulate gun misuse prevention approaches from their law enforcement perspective. This department may choose to utilize joint law enforcement and mental healthcare outreach training programs

^{313 &}quot;Global Justice Information Sharing Initiative"; Wikler and Cash, "Ethical Issues in Global Public Health," 3.

³¹⁴ Von Krogh, Ichijo, and Nonaka, *Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation.*

in community-based centers or religious institutions. These programs would address the prevention of the leading causes of gun misuse-related deaths, which are accidental shootings and suicide. These approaches would then have greater interdisciplinary cohesion both at the structural, regulatory, and practical tactical levels. It might also foster a closer alignment of their individual visions, missions, and goals with respect to gun misuse.

These forms of information sharing between the health care, homeland security, and legal disciplines would appear potentially to provide cross-disciplinary benefits. The examination of the other health care approaches not directly related to gun misuse, such as tobacco abuse, seatbelt use, obesity, and childhood poisoning might provide insights related to the construction of effective approaches to address the issues surrounding gun misuse.

Interdisciplinary approaches may also find some utility in the use of an occupational medicine and industrial hygiene practices framework typically used for viewing inherently dangerous product e.g., IDLH (immediately dangerous to life and health) when addressing guns. Guns are an inherently dangerous product, especially when misused. See Appendix F.

This thesis recommends that the homeland security, law enforcement, and healthcare disciplines work with educators to educate elementary, high school, college, and university students about gun misuse consequences. Perhaps, the disciplinarians will also learn not to misperceive, misclassify, and profile those they feel are "criminals" and more likely to participate in gun misuse. This effort might be accomplished through the use of interdisciplinary and community-based working groups that help to define more clearly the cultural arena and context these public safety and security officials are working within.

The thesis also concluded that the use of the term "gun misuse prevention" might also help to dampen the often adversarial and polarized relationships that arise around the use of the term "gun control." Those that once considered themselves to be adversaries may become allies once the problem of gun misuse is viewed correctly as an issue of gun

misuse prevention. In particular, the NRA actually began as an organization that sought to fulfill the existing need for assuring gun safety and security for gun owners and the general public. Many governmental operatives are also NRA members and might work to bridge the polarization gap to ensure that these advocacy groups work together to address public concerns for greater gun use safety and security. Perhaps, it represents a potential point for future collaboration with the NRA in assuring that safety and security goals involving gun misuse prevention are actualized.

Nonetheless, a word of caution is advisable. It must be kept in mind that differences do exist between the homeland security, legal and healthcare disciplinary perspectives. For example, intoxication with drugs and alcohol cannot be asserted as an affirmative defense to the commission of crimes in the legal system. These criminal acts often result in judicial punishments and legal sanctions. Legally, the individual is viewed as an "offender." At the same time, in the healthcare disciplinary arena, drug and alcohol abuse serves as the basis for treatment rather than punitive penalties. The individual is often viewed as a potential "victim" seeking medical attention and care. Regardless, benefits may potentially be realized by addressing gun misuse prevention during an individual's treatment for drug addiction and alcoholism within established legal and healthcare collaborative approach guidelines. The thesis now turns to discuss findings, conclusions, and recommendations related to the use of fusion and counter-terrorism centers.

3. Gun Misuse: Fusion Centers and the National Counter Terrorism Center

After the use of satellites, drones, and even the stealing of classified data by those in or contracted by the government, the public must contend with the prospect of placing trust in the government. The emergence of fusion centers, even if well intentioned with respect to safeguarding the public, can be interpreted as a source of over-bearing governmental intrusion and attempts at controlling the public. Perhaps, Albert Einstein's post WWII warning about keeping the instruments of war always in mind that serves to undermine the existence of domestic peace and tranquility, applies to this situation as well. It is possible that a high degree of governmental surveillance and exposure to the

instruments of law enforcement might unintentionally harm the public by trampling their unalienable rights as stated in the Declaration of Independence. Great care must be taken in this regard.

On the other hand, such governmental surveillance, if correctly applied to systems, may add a great deal of value in protecting the public from a gun misuse safety and security perspective. However, the correct balance must be struck with liberty. To this point, and to realize potential gains in gun misuse prevention efforts, this thesis recommends that the fusion center approaches selected must be envisioned and constructed properly to include the provision of the requisite resources and the selection of the right cross-disciplinary team members. The theories, concepts, rationales, and guidelines provided by Eisenhart, Allison, Ostrom, Bratton, Joblokov, Velegol, and Matson may provide assistance in the design of the requisite organizational and operational frameworks required to employ the use of such entities as fusion centers. See Appendix F. This thesis later goes on to discuss potential technological solutions for gun misuse prevention that may help to address these very issues including the proper balancing of security and liberty.

4. Gun Misuse Information Sharing: The Health Insurance Portability and Accountability Act and the National Crime Information Center

A greater degree of interdisciplinary collaboration, as well as greater public safety and security, was achieved by a collaborative response by agencies working together to address President Obama's 23 executive orders concerning gun violence. The president called for interagency collaboration and the sharing of information between agencies regarding the need to address gun violence. HHS and the CDC were called upon to share documentation that contained mental health information protected by the HIPAA with law enforcement officials within the NICS. To overcome this obstacle presented by HIPAA, OCR housed in HHS, appears to have established a balance between citizen privacy protections (i.e., liberty) and the inappropriate sale of guns to those with mental illness (i.e., safety and security).

These high level executive decisions avoided dealing with costly legislative, legal, and bureaucratic roadblocks in establishing the requisite basis for interdisciplinary collaboration. In essence, it streamlined the ability to share information and set the stage for the creation of practical interdisciplinary approaches to address gun misuse. This view is consistent with and supported by the paradigm shift in terminology from "gun control" to "gun misuse prevention." It underscores the need for the creation and development of interdisciplinary approaches to address gun misuse prevention called for within this thesis. At the same time, Dahl's and Shipler's warning about the good intentions of government potentially going astray should not go unheeded. This thesis concludes that it requires the creation of some sort of litmus test that checks the balance between individual rights protections including liberty and the concerns for ensuring public safety and security when it comes to the misuse of guns. This balancing test would appear to be integral to the operation of interdisciplinary approaches, which is especially true within the current technological age where privacy at times appears to have evaporated.

• Can public and private partnerships assist in addressing the occurrence of gun misuse-related injuries and deaths?

H. GUN MISUSE: PUBLIC AND PRIVATE PARTNERSHIPS AND THE USE OF TECHNOLOGY

The question remains, would it be enough simply to overcome the effects of the illegal gun market systems, polarized advocacy group initiatives, the lack of effective legislation, and criminal and terrorist-related activities? This thesis holds that even if many of these issues were to be resolved, the main causes for gun misuse-related deaths each year would still go unanswered; that is, suicides and accidental shootings. It appears that not enough has been done on the local level to address the factors that serve to limit the political empowerment of the poor, foster poverty itself, or erode community stability and resiliency. These points represent points of vulnerability with respect to the potential for the fostering of criminal activity and terrorism-related activities, as well as the occurrence of gun misuse. It appears that addressing these issues adequately will take a long period of time. Technological approaches may provide a more timely solution in the interim to address the potential consequences of gun misuse.

This thesis goes further by asking if, as with safety belt use in cars, technology-based approaches might be used to quell the occurrence of gun misuse intentional suicides, accidental shootings, and homicides while simultaneously establishing the proper balance between liberty and security. Both the public and private sectors have tremendous roles to play in the development of gun misuse prevention technological approaches. Such collaborative approaches require the building of trust. This thesis recommends that further gun misuse research efforts include the exploration and the development of RFID, GTD, smart guns and perimeter detection and containment systems. Such endeavors may find utility in the use of an industrial hygiene practices framework typically used for viewing inherently dangerous product. The thesis now discusses the findings, conclusion, and recommendations concerning technological approaches to prevent gun misuse.

1. On-line Gun Misuse Education

The thesis makes the following recommendation. Faith-based institutions are places in which individuals from the homeland security, healthcare, and legal disciplines traditionally comingle in an unofficial capacity. It is also a place where those with mental health and emotional issues, as well as those who are impoverished or in physical pain tend to seek refuge that includes a portion of the gun misuse prevention priority target audience. Often it includes those in possession of a gun with one or more of the associated issues of alcoholism, substance abuse or suicidal ideations. Interdisciplinary groups might work to place kiosks with on-line gun misuse educational programs in place. They may select to address healthcare problems concomitantly with the provision of the on-line gun misuse educational program.

Another approach might incorporate the requirement that gun owners complete some form of gun use and handling educational requirement, as is done for a driver's license. In fact, the Department of Motor Vehicles facilities may be an ideal location to house such an on-line gun misuse training program similar to the one currently required for driver's license certification testing.

These technological approaches might provide a mechanism for accomplishing this goal of gun misuse prevention in a more tactically effective and practical way with less concern for discipline-specific jurisdictional boundaries. If correctly constructed, it may also help to enhance an overall sense of public trust placed in the disciplines as the educational dialogue ensues. Gun owners who have specific knowledge in the proper handling and use of guns can also be of assistance in this process. Such individuals can serve and be recognized as community champions and role models for gun misuse prevention. This type of assistance sets the stage for the development of a more in-depth form of participant communication concerning the misuse of guns in these educational settings. The thesis now turns to discuss the intrinsic modification of guns as a means intended to provide for safe and secure gun usage.

2. Smart Guns: Intrinsic, Technology-based Gun Modifications

The literature revealed that several "smart gun" technologies currently exist, such as mechanical mechanisms, external locking devices, key or combination lock, RFID, magnetic encoding, biometric systems (e.g., grip strength and fingerprint identification technologies), location awareness, and target recognition. The report continues to note that several technological limitations currently exist, which includes the inability of technological devices to identify the gun owner accurately and reliably, and the issue of rechargeable power sources for the devices.

3. The Private Use of Home or Workplace Radio Frequency Identification Devices and Geospatial Tracking Device-enabled Guns

Technological approaches, for example, may be applied as privately owned and operated gun-monitoring systems for the home-based and recreational use of guns. Recreational uses include such activities as paint-ball gaming, sports shooting and hunting events. The use of RFID and GTD tags may receive more private and public support if they were to be viewed as being desirable safety and security features rather than being construed as efforts directed at "gun control." Gun owners, for instance, might be alerted by a gun-tag detection-unit should their gun be moved without their knowledge by an unauthorized person, or during a gun theft, within their home or office. It would

possibly include the gun owners' children, a mentally challenged or potentially suicidal person or a houseguest. Tragedies may be avoidable in such circumstances by the use of this gun safety and security technology.

These systems can be technologically engineered to be passive systems, i.e., requiring minimal end-user input, training, or changes in behavior. The gun owner may also choose to alert law enforcement or emergency services professionals of an emerging and potentially harmful situation when detecting an unauthorized movement of their gun. Any attempt to shield or disrupt the home monitoring gun security device can be engineered to trigger an immediate alert to the gun owner. Although under the gun owner's autonomous control, this approach adds an additional layer of gun safety and security. That is, with respect to the gun owner, as well as potential victims, without a direct challenge to constitution-based gun ownership rights protections. The unit's operation is completely under the control of the gun owner. In this regard, perhaps technology can supplant the need to answer the question posed by the Forefathers concerning the public's ability to participate in effective self-governance.

The potential for privacy intrusions into the home or office-based gun movement detection system can be avoided by having an encrypted send-only function with respect to the transmissions of gun movement warning signals. For example, these signals can be transmitted from the detection unit to the gun owner's cell phone text messaging application. The owner is in control of the operational unit. The cost appears to be, at first glance, relatively low. The research and development time should be of relatively short duration, as the components for this type of application, as well as home monitoring and communications technologies already exist.

Despite the noted benefits, the ultimate sustainability of this gun monitoring approach relies upon it becoming a parallel product entrenchment item that mirrors the continued presence of guns within this nation. The true test is whether this gun misuse prevention approach of a home-based unit for gun safety and security will be adopted by

³¹⁵ Jari-Pascal Curty et al., *Design and Optimization of Passive UHF RFID Systems* (Berlin: Springer Science & Business Media, 2006); see also Aiden Sidebottom et al., "A Systematic Review of Access Control as a Method to Reduce Crime in Physical Environments," *PsycEXTRA*, n.d.

a sufficient number of gun owners in the consumer marketplace. Having the ultimate control of monitoring remain with the gun owner is consistent with Ostrom's framework concerns for preserving individual autonomy.³¹⁶ It also appears to ensure a proper balance between liberty and security for the gun owner noted by Dahl.

The possibility of tying gun misuse technologies to a homeowner's insurance policy deduction or other tax discount incentive is also a consideration. With the passage of time, this approach may set the stage for the later acceptance of more overt, and potentially covert, approaches to gun misuse. It would include technological approaches to the straw, gray, and black-market systems. The development of trusting relationships is essential for these approaches to gain acceptance and widespread usage, as well as for them to succeed ultimately by becoming permanent fixtures in the marketplace environment.

4. Establishing Legal Gun Use and Gun-free Zones to Prevent Gun Misuse

Fixed, passive gun detection systems are commonly seen in the entryways to schools, airports, and government buildings. This thesis proposes that by utilizing RFID and GTD tagged gun technological applications, the presence of a gun would be detected or tracked in real time in pre-designated zones alerting officials to the potential for the occurrence of gun misuse. The locations for the establishment of these zones include, public gathering places, such as malls, movie theaters, schools, faith-based institutions, as well as public and private workplaces that may also include military training sites, hunting grounds and gun sporting, or gaming facilities.

RFID or GTD component additions could become a manufacturing or retrofitting requirement for guns. Some may complain that privacy rights have been compromised by such a requirement. However, privacy rights have been vitiated in the past by policy considerations, even with public acceptance, if done in the interest of general public

³¹⁶ Elinor Ostrom, "Self-governance and Forest Resources," *Terracotta Reader: A Market Approach to the Environment. Academic Foundation, New Delhi*, 2005, 131–155.

safety and security.³¹⁷ The legislative branch of government may, for example, attempt to mandate the incorporation of an RFID or GTD into all new guns, or specifically assault weapons, during the manufacturing process. Assertions may then arise also that gun owners cannot be required by the government to tag privately owned property. However, mandatory seat belt use and the requirement to present a driver's license containing personal information during traffic stops are examples of generally accepted governmental intrusions to ensure public safety and security. In addition a vehicle identification number (VIN), license plates, and windshield stickers for taxation purposes must legally be displayed on vehicles.³¹⁸ Guns are currently legally required to have traceable serial numbers. The identifying information must by law, be physically affixed to the gun that is private property.³¹⁹ A microchip, RFID, or GTD could be encoded with information about the gun manufacturer, seller, or owner.

The intentional disruption or destruction of an implanted microchip, RFID or GTD may be engineered to render the gun inoperable and incapable of firing. In addition, a mandatory requirement might be enacted for the RFID tag or GTD retrofitting of all existing guns by a specified compliance deadline. Such measures occur all the time for automobile safety-related recalls for repairs and upgrades. Various laws and statutes with appropriate sanctions may be enacted to hold the manufacturers, distributors, or owners of such weapons liable if they intentionally interfere with the operation of an existing gun microchip, RFID, or GTD. Additional penalties, such as a felony conviction or fines, can potentially be applied to those who refuse to comply with this mandate should their gun subsequently be used for unlawful gun misuse purposes. Those who tamper with the gun's detection or tracking mechanism, before they sell it to another person, may also be held civilly and criminally liable. Potential sanctions for the original

³¹⁷ David Lyon, *Identifying Citizens: ID Cards As Surveillance* (Cambridge: United Kingdom: Polity, 2009).

³¹⁸ Pennsylvania Department of Transportation, *Evaluation of the Use of Registration Stickers* (No. FHWA-PA-2011-010-090201) (Harrisburg, PA: Pennsylvania Department of Transportation, 2011).

³¹⁹ Richard Allen Epstein, *Takings: Private Property and the Power of Eminent Domain* (Cambridge, MA: Harvard University Press, 1985).

³²⁰ Examining Accountability and Corporate Culture in Wake of the GM Recalls: Hearing before the Subcommittee on Consumer Protection, Product Safety, and Insurance of the Committee on Commerce, Science, and Transportation, United States Senate, 113th Cong., 2 (2014).

gun owner may also apply for the downstream consequences of criminal or terrorism-related misuse by others of the deactivated gun.

The creation of these zones may be viewed as being part of gun misuse safety and security prevention efforts. Such surveillance efforts are directed not only at preventing potential criminal and terrorist activities but also accidental shootings arising from unauthorized gun use activities, as well as potential intentional suicides.

5. The Overt and Covert Use of Real-time Geospatial Tracking Devices to Elucidate and Delineate Illegal Gun Markets

This thesis recommends researching the possibility of using a randomly placed and embedded RFID device or "chip" within guns that can be read for identification purposes. This thesis also proposes the development and use of embedded and retrofitted GTD for guns. The potential for both overt and covert uses of such technologies exist, as well as the possibility that GTD can be used geospatially to track, delineate, and locate guns that are stolen, sold in illegal gun market systems, or used for illegal purposes within criminal and terrorist enterprises. The chip can be designed to contain vital information related to the manufacturer, seller, and owner of the gun for its identification should it be stolen or lost. It might help to overcome the problem of serial numbers being filed off of guns by criminals or terrorists. It may also be useful for the identification or tracking of guns lost or stolen from law enforcement officers.

Medical response personnel may also receive an early warning signal to prepare for potential gun-related injuries that may occur. The detection system may also alert and prompt members of the general public to take pre-specified actions within and around gun-free zones when a gun is detected.

In light of the failure and heavily criticized tracking of illegal marked guns in Mexico with "Operation Fast and Furious," this approach may need to garner a significant amount of support to even be considered a viable option. Also, the historical intelligence views on clandestine, espionage, and covert actions of the Central Intelligence Agency (CIA) have in more recent times been challenged.³²¹ This view

³²¹ Philip Agee, *Inside the Company: CIA Diary* (Harmondsworth, UK: Penguin, 1975).

echoes Lowenthals' position on the question of a need for secrecy. 322 It might imply the need for using more clearly stated overt as opposed to covert approaches. The covert tracking of guns may be of benefit in delineating illegal gun market networks. Notwithstanding, covert governmental operations and actions tend to erode public trust, and as such, must be very carefully weighed, especially when contemplating the potential use of interdisciplinary technological approaches. However, when it comes to the issue of technology-based gun monitoring, perhaps a lack of secrecy where guns are knowingly being tracked can serve as a potential counterintelligence deterrent to illegal gun market activities as well. That is, by letting criminals and terrorists know that guns are somehow technologically marked and can be geospatially tracked might make potential purchasers more hesitant to buy illegal market guns. Another consideration is that they are operating outside of the law and it appears would have at least questionable rights assertions in this regard concerning being tracked. As a final topic, the thesis now moves on to discuss the use of high-powered air rifles and 3-D printable plastic guns.

6. Addressing the Use of 3-D Printed Resin and High-powered Air Guns

New technologies involving the use of high power air rifles and the newly emergent printing of 3-D plastic guns has caused a great deal of concern for those within the homeland security, legal, and healthcare arenas. These items are not classified as true guns in many states and are even viewed as being toys by some despite their ability to inflict lethal wounds.

This thesis notes that in regions where air and 3-D printable "guns" are not legally classified as guns, might represent a point that allows for safety and security concerns to be strategically addressed. That is, without "legitimate" pro-gun sentiments being expressed, as these air and 3-D printable items are not actually classified or legally recognized as being "guns." It might also apply to potential gun surveillance and monitoring to identify points of intervention to ensure public safety and security. Law enforcement and healthcare professionals might team up to go into schools to warn

³²² Mark M. Lowenthal, *Intelligence Community Reform and Reorganization* (Washington, DC: Library of Congress, Congressional Research Service, 1978).

children and parents about the dangers of 3-D and air "guns" being used as "toys." This form of "toy gun" education might spill over into how children subsequently address traditional guns when they become of legal age for actual gun ownership and use. From a practical perspective, the cost of such an approach would appear to be relatively low. In the next section, conclusions and further recommendations to be drawn from this thesis are noted.

In summation, it appears that apparent public misconceptions and impediments to discourse exist. These can sometimes influence how the members of the homeland security, legal, and healthcare disciplines perceive, define, interpret, and approach issues surrounding the gun misuse-related injuries and deaths. It appears that a paradigm shift in terminology may act to provide greater disciplinary insight into these concerns of interdisciplinary interest. It appears that it might lead to the formation of an interdisciplinary perspective supportive of information sharing concerning gun misuse. Finally, it appears that public-private sector partnerships have the potential to provide greater resources in the way of new technologies to address gun misuse. This thesis recommends the use of the technological approaches mentioned previously. In addition, newly emerging technologies, such as facial recognition systems, may have a role to play. For instance, domestic gun shops could be required to have these systems in place for the recognition of suspected terrorists in the homeland security and FBI databases. If a person in the database attempts to purchase a gun, the authorities could be alerted directly about this transaction in real-time.

The shift in terminology from "gun control" to "gun misuse prevention" allowed for a non-random, purposive sampling of the literature to be performed in a more effective and efficient way. Despite this approach, the possibility of being guided as the articles were selected by a particular author's trend of reasoning may have affected choices made for subsequent articles. It may have biased the researcher unknowingly. Also, due to the sheer volume of material covered for this thesis, taking an author's meaning out of context of their body of work is also possible. The thesis was centered upon answering five research questions conceived of by the researcher. Whether these were the correct questions to ask appears to be borne out by the research finding,

conclusions, and recommendations made. However, the value of these answers will have to be validated by further research or effective applications of the recommendations in the real-world environment. A concerted attempt was made to obtain information from governmental and academic institutional sources noted to be reliable by scholars. However, documents that presented polarized views regarding guns were also used to gain a clearer perspective on various dimensions of both public and private perceptions regarding gun ownership, use, and misuse.

The question remains, would it be enough to simply overcome the effects of the illegal gun market systems, polarized advocacy group initiatives, the lack of effective legislation, and criminal and terrorist-related activities to prevent gun misuse? Might technology-based approaches be used to quell the occurrence of gun misuse-related intentional suicides, accidental shootings, and homicides? The ultimate answers to the five questions presented within this thesis, requires further exploration and research.

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APPENDIX A. GUN ANATOMY AND TERMINOLOGY

A firearm is defined as a portable gun, such as a pistol, revolver, handgun, or rifle.³²³ Small arms are firearms carried by a single individual. The international conventions governing the laws of war note, with some exceptions, that small arms fire a projectile not in excess of 15 mm (0.60 inches) in diameter.³²⁴ In Figure 1, the general physical characteristics of a gun are illustrated.

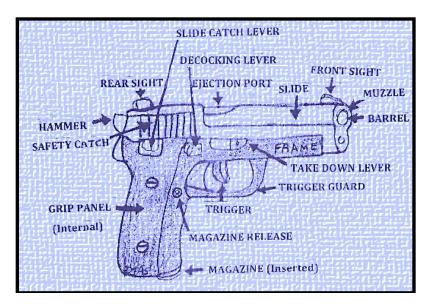


Figure 1. Diagram of Gun Components³²⁵

Guns are recognized and classified by several different means as follows.³²⁶ Based upon overall ultrastructure and size:

Handguns

³²³ Kelly, Gunpowder: Alchemy, Bombards, and Pyrotechnics: The History of the Explosive That Changed the World.

³²⁴ J. Boone Bartholomees, *U.S. Army War College Guide to National Security Policy and Strategy* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2004).

³²⁵ Adapted from Samuel A. Southworth, *U.S. Armed Forces Arsenal: A Guide to Modern Combat Hardware* (Cambridge, MA: Da Capo Press, 2004).

³²⁶ Will Fowler et al., *The Complete World Encyclopedia of Guns*, 5th ed. (Leicester, England: Anness Publishing, Ltd., 2008).

- Long guns: rifles and shotguns, and carbines
- Automatic weapons: machine guns, submachine guns, personal defense weapons, automatic rifles, and assault riffles

Based upon their ultra-structural characteristics:

- Barrel/projectile characteristics [bore diameter, caliber, gauge]: 12 gauge shotgun, 9-millimeter handgun, etc.
- Action employed [muzzle, breech, lever, bolt, revolver, semi-automatic, and automatic]: Semi-automatic M16 rifle, snub-nosed revolver, etc.
- Deportment means [hand held, mechanical mounting]: 9-millimeter handgun
- Type of barrel [smoothbore, rifled (causes projectile spin for improved flight stability), threaded (for mounting flash suppressor)]: smooth bore recoilless rifle, etc.
- Length of barrel [handguns, rifle]: long barrel shotgun
- Primary intended target [specified target for acquisition]: anti-aircraft, anti-tank, etc.
- Commonly accepted name [often manufacturer/inventor's name is used]: Gatling gun, Winchester rifle, Colt AR-15, Magnum, Tec-9, Avtomat Kalashnikova-47 (AK-47), Uzis, etc.

The "range" of a given gun is determined by the distance from the "firing" point to the point for "specified range for accuracy," (See Figure 2). In urban environments and public spaces, the distance between the shooter and those potentially injured or killed by gunfire is typically short and involve a handgun. Pistols have a specified range of accuracy at 50 meters (55 yards), and for rifles, it is 500 meters (550 yards). However, even beyond the specified range for accuracy, until the "minimum distance for safety" point is reached, the "round's" (bullet's) projectile can still be dangerous or even lethal. 328

³²⁷ Brian J. Heard, *Handbook of Firearms and Ballistics: Examining and Interpreting Forensic Evidence* (Chichester, England: J. Wiley, 1997).

³²⁸ Ibid.

The effective range and accuracy of a weapon can also be increased by the use of optical sighting mechanisms in place of iron sites that project upwardly at the end of the gun's barrel. A purpose-built sniper rifle can achieve a specified range for accuracy of 2,000 meters (2,200 yards). A successful "sniper rifle" attack has been recorded to have reached a specified range of accuracy from slightly greater than 1.4 kilometers (1.5 miles).³²⁹

SRA ERA MDS

Gun FP
$$\rightarrow$$
 ----- O ---- O \rightarrow Safety Zone

FP—firing point; SRA—specified range for accuracy; ERA—effective range of accuracy; MDS—minimum distance for safety

Figure 2. Characteristics of the Gun Projectile Flight Path³³⁰

The term "assault rifle" is usually employed for semi-automatic rifles, which possess the cosmetic ultra-structural features of a fully automatic weapon. Semi-automatic rifles require a trigger pull for each shot fired. This weapon automatically extracts and ejects the spent cartridge casing ("shell") and loads the next round into the chamber for firing.³³¹ Automatic weapons will continue to fire with a single, maintained trigger pull.

³²⁹ Heard, Handbook of Firearms and Ballistics: Examining and Interpreting Forensic Evidence.

³³⁰ Adapted from Fowler et al., The Complete World Encyclopedia of Guns.

³³¹ Wendy Cukier and Victor Sidel, *The Global Gun Epidemic: From Saturday Night Specials to AK-*47s (Westport, CT: Praeger Security International, 2006).

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APPENDIX B. INTERDISCIPLINARY COMPARISON: PROPORTIONAL APPROACHES TO ENCOUNTERED THREATS

Level	Homeland Security Safety and Security Multiple Disciplines	Public Health System Public Health Care (PHC) Occupational Medicine (OM) Medical Care (MC)	Legal System Law Enforcement (LE) Judicial System (JS)
1	Elimination of Threat(s) (e.g., eliminate terrorism plot) * RED (Severe)	PHC: Harmful Agent Eradication OM: Eliminate Use of a Toxic Chemical MC: Limb Amputation for an Infection	LE: Killing Offender (Resist Arrest) JS: Death Penalty (Capital Murder)
2	Substitution of Threat(s) (e.g., work by undercover agents, tracking of planted contraband) * ORANGE (High)	PHC: Maternal health OM: Use a Less Harmful Chemical MC: Life-long medication use for diabetes	LE: Home Monitoring of Pedophile JS: Life Imprisonment
3	Containment of Threat (e.g., boarder security, apprehension of criminals and terrorists) * YELLOW (Elevated)	PHC: Insecticide use for mosquitoes OM: Establish Exposure Limits MC: Treatment for the common cold	LE: DUI Arrest (Driving Under the Influence) JS: Short term sentence (minor drug offense)
4	Monitoring for Threat (e.g., surveillance of suspected criminals and terrorists) * BLUE (Guarded)	PHC: Waste water treatment OM: Post-Exposure Monitoring MC: Tetanus booster for laceration (cut)	LE: Release (Minor traffic accident) JS: Probation (Misdemeanor)
5	Creating Resiliency (e.g., infrastructure hardening, * GREEN (Low)	PHC: Seasonal Influenza Vaccination OM: Use of personal protective equipment MC: Healthy Lifestyles Education	LE: Police Youth Programs JS: Legal Education Programs

Proportional disciplinary approaches to encountered threats. The levels are graduated with respect to threat severity, with level 1 the most and level 5 the least severe. These levels in large part determine the approach taken by a given discipline to a specific anticipated or encountered threat. (*) The color codes for the Homeland Security Advisory System (HSAS), which was replaced by the National Terrorism Advisory System (NTAS) are also noted in the footnote. 332

³³² Adapted from George W. Bush, *Homeland Security Advisory System* (Washington, DC: White House, 2003); "Secretary Napolitano Announces New National Terrorism Advisory System to More Effectively Communicate Information about Terrorist Threats to the American Public," January 27, 2011, http://www.dhs.gov/ynews/releases/pr_1296158119383.shtm; Greg Miller, "Obama Administration to Replace Color-Coded Terror Alerts with New Warning System," *The Washington Post*, January 27, 2011; "Medical Practice Framework Guidelines," accessed March 12, 2013, http://www.ama.org; "Occupational Medicine Practice Framework Guidelines"; "Commission on Accreditation for Law Enforcement Agencies (CALEA)"; "Legal Framework Guidelines"; Department of Homeland Security, *National Response Framework*; Federal Emergency Management Agency, *National Incident Management System*; Federal Emergency Management Agency, *Incident Command System*.

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APPENDIX C. SUMMARY OF FUSION CENTER GUIDELINES AND KEY ELEMENTS

The following information is taken directly from the Office of Justice Programs. See: Global Justice Information Sharing Initiative, *The National Criminal Intelligence Sharing Plan*.³³³ The reader is referred to this document for a greater degree of review and analysis.

- "Adhere to the tenets contained in the National Criminal Intelligence Sharing Plan (NCISP) and other sector-specific information sharing plans, and perform all steps of the intelligence and fusion processes.
- Collaboratively develop and embrace a mission statement, and identify goals for the fusion center.
- Create a representative governance structure that includes law enforcement, public safety, and the private sector.
- Create a collaborative environment for the sharing of intelligence and information among local, state, tribal, and federal law enforcement agencies, public safety agencies, and the private sector.
- Utilize memoranda of understanding (MOUs), non-disclosure agreements (NDAs), or other types of agency agreements, as appropriate.
- Leverage the databases, systems, and networks available via participating entities to maximize information sharing.
- Create an environment in which participants seamlessly communicate by leveraging existing systems and those currently under development, and allow for future connectivity to other local, state, tribal, and federal systems. Use the DOJ's global justice extensible markup language (XML) data model and the national information exchange model (NIEM) standards for future database and network development, and consider utilizing the justice information exchange model (JIEM) for enterprise development.

³³³ Office of Justice Programs, Global Justice Information Sharing Initiative, *The National Criminal Intelligence Sharing Plan*.

- Develop, publish, and adhere to a privacy and civil liberties policy.
- Ensure appropriate security measures are in place for the facility, data, and personnel. Integrate technology, systems, and people.
- Achieve a diversified representation of personnel based on the needs and functions of the center.
- Ensure personnel are properly trained.
- Provide a multi-tiered awareness and educational program to implement intelligence-led policing and the development and sharing of information.
- Offer a variety of intelligence services and products to customers.
- Develop, publish, and adhere to a policies and procedures manual.
- Define expectations, measure performance, and determine effectiveness.
- Establish and maintain the center based on funding availability and sustainability.
- Develop and implement a communications plan among fusion center personnel; all law enforcement, public safety, and private sector agencies and entities involved; and the general public."334

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³³⁴ Office of Justice Programs, Global Justice Information Sharing Initiative, *The National Criminal Intelligence Sharing Plan*.

APPENDIX D. LIST OF PRESIDENT OBAMA'S EXECUTIVE ORDERS FOR GUN VIOLENCE REDUCTION

The following information is taken directly from the Federal Register.³³⁵ The reader is referred to this document for a greater degree of review and analysis.

- "Issue a presidential memorandum to require federal agencies to make relevant data available to the federal background check system.
- Address unnecessary legal barriers, particularly relating to the Health Insurance Portability and Accountability Act that may prevent states from making information available to the background check system.
- Improve incentives for states to share information with the background check system.
- Direct the Attorney General to review categories of individuals prohibited from having a gun to make sure dangerous people are not slipping through the cracks.
- Propose rulemaking to give law enforcement the ability to run a full background check on an individual before returning a seized gun.
- Publish a letter from ATF to federally licensed gun dealers providing guidance on how to run background checks for private sellers.
- Launch a national safe and responsible gun ownership campaign.
- Review safety standards for gunlocks and gun safes (Consumer Product Safety Commission).
- Issue a presidential memorandum to require federal law enforcement to trace guns recovered in criminal investigations.
- Release a DOJ report analyzing information on lost and stolen guns and make it widely available to law enforcement.
- Nominate an ATF director.

^{335 &}quot;2013 Barack Obama Executive Orders."

- Provide law enforcement, first responders, and school officials with proper training for active shooter situations.
- Maximize enforcement efforts to prevent gun violence and prosecute gun crime.
- Issue a presidential memorandum directing the CDC to research the causes and prevention of gun violence.
- Direct the Attorney General to issue a report on the availability and most effective use of new gun safety technologies and challenge the private sector to develop innovative technologies.
- Clarify that the Affordable Care Act does not prohibit doctors from asking their patients about guns in their homes.
- Release a letter to health care providers clarifying that no federal law prohibits them from reporting threats of violence to law enforcement authorities.
- Provide incentives for schools to hire school resource officers.
- Develop model emergency response plans for schools, houses of worship and institutions of higher education.
- Release a letter to state health officials clarifying the scope of mental health services that Medicaid plans must cover.
- Finalize regulations clarifying essential health benefits and parity requirements within Affordable Care Act (ACA) exchanges.
- Commit to finalizing mental health parity regulations.
- Launch a national dialogue led by Secretaries Sebelius and Duncan on mental health."³³⁶

^{336 &}quot;2013 Barack Obama Executive Orders."

APPENDIX E. A BRIEF OVERVIEW OF SEATBELT USE ADOPTION IN THE UNITED STATES

In the 1930s, physicians in the United States added lap belts to their own cars and urged manufacturers to add them to all cars.³³⁷ In 1953, the Colorado State Medical Society released a policy statement supporting the use of safety belts in cars.³³⁸ In 1954, the Sports Car Club of America followed with the requirement for lap belt usage by all competing racecar drivers.³³⁹ The year 1955 marked the year in which the National Safety Council, American College of Surgeons, and the International Association of Chiefs of Police voted to support lap belt installation in cars.³⁴⁰ The California codes were revised to require state approval prior to a given seat belt's sale or use.³⁴¹ The Society of Automotive Engineers (SAE) moved to appoint a Motor Vehicle Safety Belt Committee.³⁴²

In 1956, Volvo introduced the cross-seat diagonal belt as an "accessory option" and added belt anchors in 1957.³⁴³ In the same year, the U.S. House of Representatives appointed a special subcommittee on traffic safety that had open hearings on the effectiveness of seat belt usage in automobiles.³⁴⁴ Nils Bohlin, in 1958, while working for Volvo, patented the "Basics of Proper Restraint Systems for Car Occupants."³⁴⁵ It

³³⁷ David C. Viano, *Seat Belts: The Development of an Essential Safety Feature* (Warrendale, PA: Society of Automotive Engineers, 2003).

^{338 &}quot;Starting to Click: A History of Automotive Seatbelts—Page 2," accessed July 9, 2013, http://www.secondchancegarage.com/public/seat-belt-history.cfm.

³³⁹ Ibid.

³⁴⁰ "Safety Belt Use Laws," accessed July 9, 2013, http://www.iihs.org/laws/safetybeltuse.aspx.

³⁴¹ Ibid

³⁴² Daniel J. Holt, *100 Years of Vehicle Safety Developments* (Warrendale, PA: Society of Automotive Engineers, 2005); see also Michelle Kuhn and Jed Lam, *Increasing Seat Belt Use among 8- to 15-Year-Olds* (Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, 2008).

^{343 &}quot;Child Restraint/Belt Use Laws," accessed July 9, 2013, http://www.iihs.org/laws/state_laws/restraint.html.

^{344 &}quot;Special Committee," accessed July 9, 2013, http://www.ntsb.gov/about/special committee.

³⁴⁵ Nils I. Bohlin, "A Statistical Analysis of 28,000 Accidents, with Emphasis on Occupant Restraint Value," (SAE Technical Paper: 670925), presented at the 11th Car Crash Conference, Society of Automotive Engineers, Anaheim, CA: 1967, doi:10.4271/670925.

was followed by Volvo's releasing the 3-point restraint belt in 1959 as a standard feature in all of its automobiles in Sweden.³⁴⁶ In the same year New York State rejected the seat belt requirement, and again in 1960.³⁴⁷ The SAE issued a standard for U.S. seat belts in 1961.³⁴⁸ In 1962, Virginia Trailways was noted to be the first U.S. bus company to install passenger safety belts.³⁴⁹

Despite the fact that concerted and long-term healthcare discipline involvement was required in the face of continued skepticism, car safety belts are now a standard legal requirement, which varies by state. Seat belts are legally required for front seat passengers in all states, except in New Hampshire.³⁵⁰ The healthcare system can provide some definitional guidance on the approach taken by prevention. To this point, it might be helpful to provide the basic definitions for prevention as viewed from a healthcare perspective.

Primary prevention involves the use of interventions designed to eliminate, increase resistance to or avoid the exposure to the agents causing disease. The provision of vaccinations for the flu and sanitation are examples of primary prevention.

Secondary prevention relies upon interventions to detect an existing disease process and to treat it prior to the development of symptoms or the consequences of disease expression. Screening for diabetes and high blood pressure in those without symptoms to provide early treatment are examples of secondary prevention.

Tertiary prevention involves the use of treatment and rehabilitation interventions to address and minimize the harmful consequences, either physical or psychological

³⁴⁶ Hurst, "Compulsory Seat Belt Use: Further Inferences," 27–33; see also Rune Andréasson and Claes-Göran Bäckström, *The Seat Belt: Swedish Research and Development for Global Traffic Safety* (Stockholm: Kulturvårdskommittén Vattenfall AB, 2000), 12.

³⁴⁷ B. W. Pace, R. Thailer, and T. G. Kwiatkowski, "New York State Mandatory Use Law: Patterns of Seat Belt Use before and after Legislation," *Journal of Head Trauma Rehabilitation* 3, no. 2 (1988): 91.

 $^{^{348}}$ "The History of Seat Belt Development," February 22, 2013, http://www.autosafety.org/history-seat-belt-development.

³⁴⁹ M. R. Appleby and L. J. Bintz, Increased Seat Belt Use as a Result of Improved Seat Belt Systems (SAE Technical Paper 740048) (New York: Society of Automotive Engineers, 1974), doi:10.4271/740048.

³⁵⁰ Sharon Lawrence, *Mandatory Seat Belt Laws: State/Federal Controversy Brewing* (Washington, DC: National Conference of State Legislatures, Office of State-Federal Relations, 1986).

disability or death, resulting from established symptomatic disease that includes such interventions as those for the treatment of strokes and heart attacks.

Additional literary resources are provided within the thesis for review.

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APPENDIX F. REVIEW OF SELECTED AUTHORS CONCERNING ORGANIZATIONAL DESIGN AND MANAGEMENT THEORY

Ostrom noted that sematic relationships are important.³⁵¹ The very presence of a gun can convey very different meanings depending upon who is viewing the gun. It not only applies to gun ownership supporters and opponents but to gun misuse responders as well. For example, law enforcement officers might find pride in the symbolism of the gun they carry at their side. However, a pediatric trauma surgeon might find the mere presence of this gun abhorrent. Further, Eisenhart notes that these individuals may not be aware of what structural features and causal factors drive their social patterns of normative behavior.³⁵² This semantic relationship between what guns symbolizes and what their presence means must be borne in mind when interdisciplinary communication concerning guns occurs. It is intimately tied to how the stakeholders perceive the world and the roles that guns play within it. Eisenhart notes that both insider and outsider views are also important when dealing with social issues.³⁵³ Such an approach may provide room for essential gun ownership supporter (insider) and gun ownership opponent (outsider) perspectives and dialogue concerning gun misuse prevention efforts.

Bratton lists eight elements required to reach the accomplishment of a given vision.³⁵⁴ The proactive sorting out of potential adversaries, competitors, and collaborators is essential. It is important to determine the cognitive-emotional balance with respect to potential team members, as well as outsiders. Bratton also notes that key attributes, such as competency, reliability, consistency, and the establishment of trust, are essential for sustained success. Bratton states it is important to present an individual's

³⁵¹ Elinor Ostrom, "Multiorganizational Arrangements and Coordination: An Application of Institutional Analysis," in *Guidance, Control, and Evaluation in the Public Sector*, ed. Franz-Xaver Kaufmann, Giandomenico Majone, and Vincent Ostrom (Berlin and New York: Walter de Gruyter, 1986), 495–510.

³⁵² Margaret A. Eisenhart, "Conceptual Frameworks for Research circa 1991: Ideas from a Cultural Anthropologist; Implications for Mathematics Education Researchers (Plenary Address)," in *Proceedings of the Thirteenth Annual Meeting of PME-NA*, Blacksburg, Virginia. Karlsruhe, Germany: International Group for the Psychology of Mathematics Education, 1991.

³⁵³ Ibid.

³⁵⁴ Bratton and Tumin, Collaborate or Perish!: Reaching across Boundaries in a Networked World.

vision clearly and succinctly to others to obtain their buy-in. He notes the goal is to capture their imagination, support, energy, and protective cover, for what has now become a shared vision. It is essential to begin determining what role each member of the team will play. He notes that the team leader is also required to passionately pursue the vision and maintain the playbook for its accomplishment. The leader must envision, create, and act as a catalyst for a sustainable platform for collaboration, which appears to correlate with Eisenhart's "kernel." 355

Bratton notes that team member involvement is essential as it instills a sense that their contributions are significant to the platform's overall materialization and development. The vision must capture the imagination, support, energy, and protective cover of the involved team members. This vision gives them a sense of process ownership and buy-in. Checking the quality and quantity of progress relies on rightsizing the way forward, according to Bratton. He notes the project must be doable and capable of delivering value quickly. For a service approach to become sustainable, it must be of value to the end users. Assuring the acquisition of resources is essential to deliver on promises made. As a result, the leader must continue to monitor and attempt to garner political support and stay in the spotlight of public and private interest.

This thesis proposes an acrostic for envisioning the domain relationships reside within when determining the degree of participant conflict or collaboration. It is the "CLAM'N C," (coercion, litigation, arbitration, mediation—negotiation—collaboration), model. Upon moving backwards from collaboration towards coercion, in general, an increasing risk for devaluation, in-group and out-group conflict, and mistrust among participants seems to occur. It seems necessary to stay out of the "CLAM" portion in which a third party is always needed to help the involved parties reach a point of

³⁵⁵ Eisenhart, "Conceptual Frameworks for Research Circa 1991: Ideas from a Cultural Anthropologist; Implications for Mathematics Education Researchers (Plenary Address)."

resolution to the issue at hand. The point is that the involved parties should move from negotiation towards a more mutually beneficial and collaborative relationship.³⁵⁶

Bratton does not seem to mention the creative process of the involved team members, other than alluding to it in relationship to the role of the leader. Kathryn Jablokow, Darrel Velegol, and Jack Matson have several excellent articles and website educational presentations on the subject of creativity well worth the reader's time. They cover such topics as creative diversity ("everyone" is creative with unique brands), six CENTER (character, entrepreneurship, ownership, tenacity, excellence, and relationship) practices, which are a person's attitudes, behaviors, habits, and experiences define their "creative identity," and "intelligent fast failure" (redefines failure as "a map to the unknown rather than a self-study," i.e., failure must occur for success to be ultimately realized). These topics are intimately related to Bratton's eight elements for realizing a shared vision, noted previously. Jablokow, Velegol, and Matson also discussed the issues of idea generation, idea evaluation, creative collaboration, research and resistance research, and the metrics used to gauge idea success.

In light of the Surgeon General's report, metrics appear to be extremely important in evaluating the effectiveness of gun misuse prevention approaches. The use of lag (reflection on past activities leading to a goal) and lead (future planned activity goals) metrics can assist in defining progress being made by a given approach and to guide approach activities further.³⁵⁸ The data available from local and national statistical databases, concerning gun related injuries and deaths, might serve to guide this process.

³⁵⁶ Damon T. Arnold, *The Theory of Social Disruption* (Bloomington, IN: Authorhouse, 2012); U.S. Government Accountability Office, *Report to Congressional Requesters, Oversight of Food Safety Activities: Federal Agencies Should Pursue Opportunities to Reduce Overlap and Better Leverage Resources* (GAO-05-213) (Washington, DC: U.S. Government Accountability Office, 2005).

³⁵⁷ Kathryn Jablokow, "The Thinking Expedition: A Course in Creativity, Innovation and Change," in *Proceedings of the 2001 ASEE Annual Conference on Engineering Education*, Albuquerque, NM, 2001; "Darrell Velegol"; Matson, "Failure 101: Rewarding Failure in the Classroom to Stimulate Creative Behavior," 82–85; Kathryn W. Jablokow and Michael J. Kirton, "Problem Solving, Creativity, and the Level-Style Distinction," in *Perspectives on the Nature of Intellectual Styles*, ed. Li-Fang Zhang and Robert J. Sternberg (New York: Springer, 2009), 137–168.

³⁵⁸ "Lead and Lag Indicators," 2010, www.slideshare.net/ianjseath/understanding-lead-and-lag-indicators; Julius Shishkin and Geoffrey Hoyt Moore, *Composite Indexes of Leading, Coinciding and Lagging Indicators*, 1948–1967 (New York: National Bureau of Economic Research, 1968).

Matson intimates that the drawbacks of fear, apprehension, and dread, have no place in this process. Mistakes, he notes, must be allowed to occur as the system is tested, which can involve the use of mock submittals to observe how the organization responds. Further, he indicates that learning new skills is the essence of gaining practical excellence, while entrepreneurship is about the exploration for potential opportunities or benefits. Bratton notes team members must ultimately deliver on performance promises, such as "better," "cheaper," "faster," or "more efficient, equitable or effective." The process outcome must also pay for everyone involved. Such currency may be in the form of money and power, or glory and honor. This concept is an interesting point when considering Underwood's views in *Armed Groups*, by Norwitz. In his chapter titled, "Pirates, Vikings and Teutonic Knights," Underwood notes that members of these three groupings prize material objects, a combination of material objects and ideas, or ideas alone, respectively. It would appear that the legal, medical, and homeland security disciplines all have an altruistic ideology based upon the defense of the public as a driving force akin to the Teutonic Knights.

The four steps to the engineering approach to problem resolution are: "define opportunity, discover ideas, develop the design and demonstrate the solution." ³⁶² It appears that metrics are essential for the validation of value, efficiency, and effectiveness of any idea suggested and subsequently implemented. However, it appears that in the

³⁵⁹ Jack V. Matson, *How to Fail Successfully* (Houston, TX: Dynamo Pub., 1991).

³⁶⁰ John Bratton and Jeffrey Gold, *Human Resource Management* (Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers, 1999); see also Board on Health Sciences Policy; Institute of Medicine, *Research Priorities in Emergency Preparedness and Response for Public Health Systems: A Letter Report* (Washington, DC: National Academies Press, 2008); see also J. Baldwin Norman, "Public versus Private Employees: Debunking Stereotypes," *Review of Public Personnel Administration* 11, no. 2 (1991): 1–27; Bradley E. Wright, "Public Service and Motivation: Does Mission Matter?" *Public Administration Review* 67, no. 1 (January/February 2007): 54–64; Terrence R. Mitchell, "Matching Motivation, Strategies with Organizational Contexts," in *Research in Organizational Behavior*, vol. 19, ed. L. L. Cummings and Barry M. Staw (Greenwich, CT: JAI Press, 1997), 57–149; Katherine C. Naff and John Crum, "Working for America: Does Public Service Motivation Make a Difference?" *Review of Public Personnel Administration* 19, no. 4 (1999): 5–16.

³⁶¹ Jeffrey Norwitz, ed., *Armed Groups: Studies in National Security, Counterterrorism, and Counterinsurgency* (Newport, RI: Naval War College, 2008): 3–14; see also Jeffrey H. Norwitz, *Pirates, Terrorists, and Warlords: The History, Influence, and Future of Armed Groups around the World* (New York: Skyhorse Pub., 2009).

³⁶² Cailin Elizabeth Hillier, "Establishing Metrics to Quantify the Vulnerability of Municipal Supply Wells to Contaminants from Surface Water Sources" (master's thesis, University of Waterloo, 2014).

practical world, failures are often not viewed as being of the intelligent fast failure (IFF) type noted by Matson. Rather, failures seem to be viewed as the lack of accountability or incompetency type in which errors are often swept under the proverbial carpet to avoid liability and scorn. Errors of this type seem to exert a chilling effect on both future funding and opportunities to improve upon disciplinary approaches to any problem encountered by the disciplines including gun misuse. This situation is especially true in a society requesting more transparency on the part of service providers and government agencies. As a result, without effective results and accountability, making progress apparently can be severely hampered. Further, in this rapidly paced modern environment, such metrics are going to be demanded more and more from government by both the public and private sectors. It would appear to include homeland defense and security, healthcare, and legal approaches to the issue of gun misuse and must be contended with.

Attempts to assist at risk individuals may encounter several challenges and various forms of resistance within various communities that may take the form of legitimate or illegitimate, centralized or de-centralized community-based networks as noted by Brafman.³⁶⁴ It may also involve the appearance of emergent systems as noted by Lewis.³⁶⁵ These systems may materialize as advocacy groups or other public and private sector entities that legitimately or illegitimately claim to "protect" the public.³⁶⁶ The point is that these networks and emergent systems must be correctly understood and interpreted.

That is, for both the potential benefits, as well as the negative attributes they may portend for those at risk for gun misuse consequences. It also has implications regarding

³⁶³ Stewart L. Tubbs, Kathryn W. Jablokow, and Michael J. Kirton, "Addressing the Need for Problem Solving and Creativity by Integrating Adaption-Innovation Theory with Leadership Competencies Theory," *The Journal of Current Research in Global Business* 15, no. 24 (2012): 1–19.

³⁶⁴ Brafman and Beckstrom, *The Star Fish and the Spider—The Unstoppable Power of Leaderless Organizations*.

³⁶⁵ Ted G. Lewis, Thomas J. Mackin, and Rudy Darken, "Critical Infrastructure as Complex Emergent Systems," *International Journal of Cyber Warfare and Terrorism* 1, no. 1 (2011): 1–12.

³⁶⁶ Jeffrey M. Barry, "The Tactics of Advocacy," in *Lobbying for the People: The Political Behavior of Public Interest Groups* (Princeton: Princeton University Press, 1977), 212–252.

Eisenhart's views on the need for considering both outsider, as well as insider viewpoints.³⁶⁷ Such considerations might allow for a more honest dialogue between legal gun owners, potential victims, and interdisciplinary team members combating gun misuse within this nation's society.

Perhaps some assistance in this regard can be gained by turning to Cynefin modeling. Complicated and complex issues both involve sensing and responding. Yet these domains do differ. Issues within the complex domain are loosely coupled and allow for probing and the enabling of constraints to yield "emergent practices." The issues within the complicated domain have governing constraints, are tightly coupled, amenable to analysis and have the potential to yield "good practices." The complex and polarizing issues surrounding gun misuse potentially may be elucidated and resolution assisted by a paradigm shift in terminology presented in this thesis. The various disciplines may be approaching gun misuse with a perception of it as being either complex or complicated in nature, which potentially adds another dimension to how these disciplines ultimately operate. A discrepancy in perception of whether gun misuse is a complex or complicated issue may act to further challenge interdisciplinary cooperation and teamwork at a fundamental level by facilitating the movement of gun misuse issues from the complex to the complicated domain within the Cynefin model framework. Such a shift in perspective might help to clarify further and define disciplinary roles and responsibilities not only for the disciplines themselves but also the public and private sectors that stand in judgment of their efforts as well. A better comprehension and perspective by all those involved concerning the emergent practice approaches needed to address gun misuse concerns may then exist. It may also promote more effective and efficient pathways to the formulation and development of good prevention-based practices, if not ultimately best practices.

³⁶⁷ Margaret Eisenhart, "Boundaries and Selves in the Making of 'Science," *Research in Science Education* 30, no. 1 (2000): 43–55.

APPENDIX G. FIREARMS ADDED BY PRESIDENT CLINTON'S ASSAULT WEAPONS BAN

- Baretta AR-70 and its SC-70 variant
- Colt AR-15
- Fabrique National FN FAL, FN LAR, FNC, MAC-11, MAC-11/9, MAC-12
- Action Arms Israeli Military Industries Uzi
- Action Arms Israeli Military Industries Galil
- Norinco, Mitchell Arms and Poly Technologies AK-47
- INTRATEC TEC-9, TEC-22, TEC-DC9
- Steyr AUG
- Shotguns with revolving cylinders—e.g., Striker 12 ("Street Sweeper")

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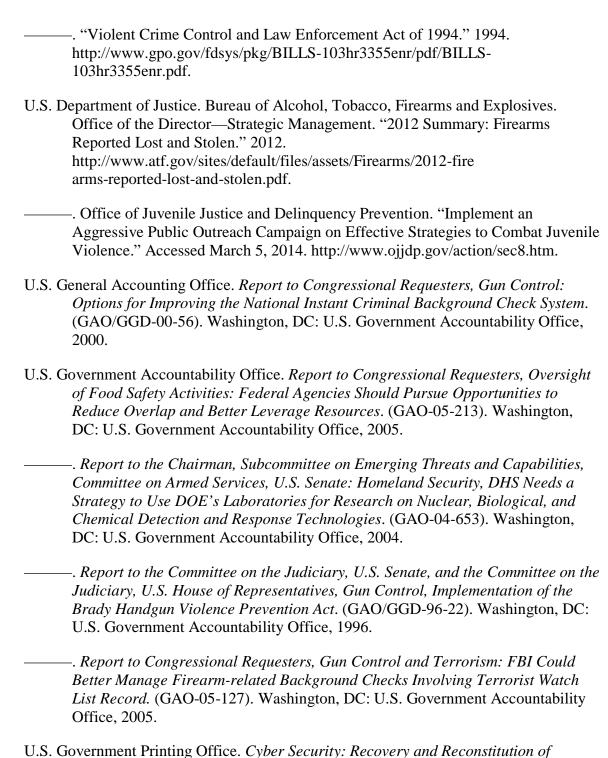
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